SURVEY of GERONTOLOGICAL CURRICULA IN CANADIAN GENERIC BACCALAUREATE NURSING PROGRAMS

by

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B.N., McGill University, 1969

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

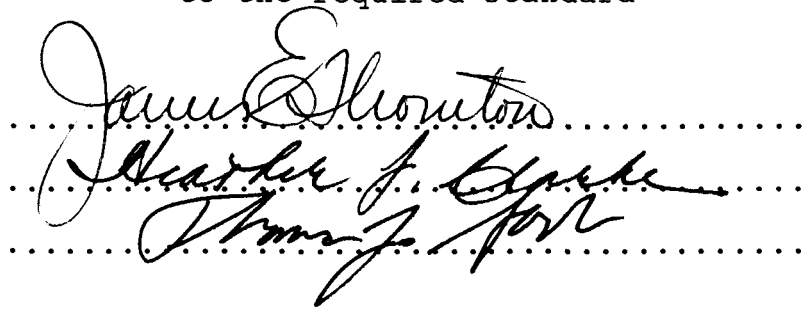
in

THE FACULTY OF GRADUATE STUDIES

(Administrative, Adult and Higher Education)

We accept this thesis as conforming

to the required standard



THE UNIVERSITY OF BRITISH COLUMBIA

September, 1991

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Date Sept 17, 1991

DE-6 (2/88)

ABSTRACT

The current status of gerontological nursing curricula in Canadian generic baccalaureate nursing programs has not been studied. As the Canadian society changes the health care system is struggling to provide adequate health care to the growing population over the age of 65. Nurses must be prepared to assist the elderly in the community and in institutions to cope with increasing disabilities. Therefore, the study of gerontological nursing should be a requirement in a nurses' basic education to prepare them to work with older clients in all settings.

This study used a survey methodology to determine the present status of gerontological content in baccalaureate nursing education curricula. Questionnaires were sent to each of the 22 deans/directors of the Canadian generic baccalaureate nursing programs and to 31 provincial reputational "experts" in the field of gerontology. A return rate of 90% and 93% was obtained respectively.

The study asked five questions: 1) What nursing model or concepts are used by the generic baccalaureate schools of nursing? 2) What gerontological content is included in these programs? 3) What gerontological content is integrated in courses or taught in required or elective specific gerontology courses? 4) What gerontological clinical experiences are required? and 5) Are faculty academically prepared to teach gerontological content? Answers to these

questions were compared with similar questions asked of reputational "experts".

A quarter of the schools did not use nursing concepts or models while many schools chose a nursing model which was not consistent with their philosophy of health. Ninety percent of the schools taught gerontology content in integrated courses; half of the schools also offered a specific gerontology course of which 40% were elective courses. Even though all 49 listed gerontology topics and 28 patient problems and care techniques were taught by the majority of the schools there is little evidence the schools are producing gerontology prepared nurses. The gerontology clinical hours accounted for only 7.4% of the total clinical experiences. The "experts" recommended gerontology receive 21% of the clinical hours and that it be dispersed in a variety of community and clinical settings. Few (5%) faculty members were prepared with a post graduate degree in gerontology to act as positive role models for the students. Few (2%) students chose a gerontology practicum in their last year.

The findings and recommendations are meant to assist educators with the task of expanding the gerontological curricula in generic baccalaureate nursing programs. The nine recommendations address ways to assist schools to reevaluate their curriculum and improve nursing care to the elderly in Canadian society.

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ACKNOWLEDGEMENTS

It is with pleasure that I thank all the respondents to the questionnaires for sharing information and opinions with me to make this project possible. I enjoyed speaking with nurses across the country while gathering data. I would also like to thank the members of my committee and other supporters. Dr. James E. Thornton for his many hours of discussion and interest in this study; Dr. Heather Clarke for her patience and direction in developing the larger picture and Dr. Tom Sork for his quiet support and helpful comments.

I wish to thank the staff of Vancouver General Hospital's Staff Development Department and the Family Practice units for their support over the past three years as well as thank my many friends who assisted in many ways but most importantly I knew they were there. Last, but not least, thank you to my family for their support and encouragement. To Jill, Scott and Kim, I was able to watch you growing up from my spot at the computer and I liked what I saw, and to Dick-let our new life begin!

CHAPTER 1

INTRODUCTION

STATEMENT of THE PROBLEM

Canadian society is rapidly changing demographically, socially and economically. Health care services are struggling to adapt to these changes and the demands of the society. One particular issue is how the aging of the population will impact on the quality of health care. The Canadian Nurses Association stated (1987b) that nurses were in a position to enhance the quality of health care for the elderly in the home, the community and in institutions (p.16). Discussion and development of gerontological content in the generic baccalaureate nursing programs is long overdue. Brower et al (1985) noted that few undergraduate programs taught much beyond normal aging changes and saw this as "testimony to academic lag behind social need" (p.45). The question to be explored in this study is how generic nursing schools prepare professional baccalaureate nurses to meet the health care needs of aging Canadians.

PURPOSE of THE STUDY

The purpose of this exploratory study was to survey generic baccalaureate nursing programs and the opinions of reputational "experts" regarding gerontological curricula organization, gerontological content and clinical experience. This study identified opinions about both health-illness continua and nursing models or concepts that influence

curricula decisions and about faculty's academic qualifications for teaching gerontology in the baccalaureate nursing programs in Canada.

According to previous surveys, (such as Malliarkis & Heine,1990; Schlepp, 1990; Johnson & Connelly, 1990) generic baccalaureate nursing programs are not producing nurses with enough gerontological nursing knowledge and skills to meet the needs of the older clients using health care services. Gerontological nursing is a relatively new field of study with a developing body of knowledge. Little has been written on how to introduce gerontological nursing content and learning experiences into existing curricula. To date there is no known survey of the current status of gerontological nursing content in Canadian generic bacaalaureate schools of nursing. There is no consensus in nursing as to appropriate gerontological content and experience to include in generic baccalaureate nursing education.

BACKGROUND

The Canadian population is aging: the number of people over 65 is expected to triple by the year 2031, until this over 65 age group comprises one in five of the population. With age, more physical disabilities occur. At the same time support systems break down with the result that more older people require mental, physical and emotional support. Many, alone and poor with little social status, require social services to maintain their level of functioning. As a person

ages, more health care services are used in a variety of settings. Nurses are present in all these settings and can play a vital role in guiding the elderly person to become as independently functional as possible. Bergman stated in 1986 that "nurses, because of their humanistic approach and preparation for both care and cure, are the most willing, best qualified group to take the lead in developing and providing services for the elderly and chronically ill" (p.115).

Gerontological nursing began in the United States in the mid 1960s and has grown steadily with the addition of textbooks, journals and American standards of nursing care. Canada has been slower to respond to the need for gerontological nursing. There are recommended Canadian Gerontological Standards that are being reviewed. These statements declare, "Gerontological nursing is a specialty that focuses on enhancing the quality of life for the older person in community and institutional settings" (Gerontological Nurses Association, 1987, p.3). Currently there are no mandated gerontological nursing standards in Canada, nor any official testing of gerontological knowledge for the attainment of the title RN. The schools of nursing are obligated by the provincial organizations to teach only the concepts of life span development. Each school chooses its own nursing model and conceptual framework to develop the curriculum. Therefore, no two schools' programs are alike.

One framework for analysing generic baccalaureate nursing education is Reed's (1987) "Rhythm of nursing education" model.

This model incorporates the four common concepts of nursing: person, environment, nursing and health. Although the way these four concepts are perceived influences each faculty's decisions on content, teaching methodology and clinical experiences, Reed's model can guide faculty and administrators in their decisions to integrate or block-schedule gerontological content; topics to choose and their sequence of presentation; and appropriate clinical experience and their placement in the program.

Nursing faculty act as positive role models for students and influence their choice of work setting following graduation. If students are encouraged to view gerontology as a challenging and rewarding field of nursing, they are more likely to choose to work in one of the variety of settings where the care of the elderly predominates. Thus, the introduction or expansion of gerontological education into generic baccalaureate nursing programs can influence change and prepare nurses to work with the elderly in all health care settings.

STUDY QUESTIONS

This exploratory study addressed the following questions.

1) What nursing model or concepts are used by the generic baccalaureate school of nursing?

2) Is gerontological content taught in an integrated manner or in a required or elective specific gerontology course?

3) Are faculty academically prepared to teach gerontological content?

4) What gerontological content is included in these programs?

5) What gerontological clinical experiences are required and in what year of the program are they provided?

DEFINITIONS

The following definitions were used in this study.

1). Nursing practice: "a dynamic, caring, helping relationship in which the nurse assists the client to achieve and maintain optimal health. The nurse fulfills this purpose by applying knowledge and skills from nursing and related fields using the nursing process, the substance of which is determined by a conceptual model(s) for nursing" (Canadian Nurses Association, 1987a, p.iii).

2). Gerontological Nursing: "The scientific study of the nursing care of the elderly for the purpose of providing knowledge of the aging process to design nursing care and services which best promote health, longevity and the highest level of functioning possible in the aged" (Gunter, 1983, p.8).

3). Gerontology: "the scientific study of the factors impacting the normal aging process and the effects of aging."(Eliopoulos, 1987, p.3).

4). Geriatrics: "the branch of medicine concerned with the illnesses of old age and their care. (Eliopoulos, 1987, p.3).

5). Generic Baccalaureate Nursing Program: This program integrates liberal and professional nursing education at any accredited Canadian University which confers a degree in nursing (BScN, BSN, BN.). It is commonly a four-year program and at present has four prime areas of clinical focus: medical-surgical nursing, maternal/child health, psychiatric/mental health nursing, and community health.

6). Elderly: The term used in North America for persons over the age of 65.

7). "Expert": Identified by President's of Provincial Gerontological Nurses Interest Groups as reputational "experts" and leaders in the field of gerontology.

ORGANIZATION of the STUDY

This study on "Gerontological Curricula In Canadian Generic Baccalaureate Nursing Programs" addressed issues and factors influencing the development of gerontological curricula in generic nursing programs.

Chapter 2 is a review of the literature that explores the need for gerontology content in generic nursing programs as an attempt to meet the demands of society and in particular those, the elderly, who are the highest users of health care. The

review documents the development of gerontological nursing, its components and distinctiveness from other fields of nursing and reasons why it has failed to entice nurses to become academically prepared in this clinical area. The literature was further reviewed to determine what gerontological content and experiences should be included and in what year of a nursing program. A conceptual framework that incorporates the four nursing concepts is introduced and was applied to gerontological nursing.

Chapter 3 addresses the methodology used for this study. The survey questionnaire methodology is discussed and the research design is outlined. Chapter 4 records the findings and uses tables and figures to illustrate the data. This chapter consists of five sections: demographics of the samples, curricula organization, gerontological content, clinical experiences and responses to other questions. Chapter 5 discusses the results of this study, implications for the future and describes nine recommendations.

This project was a challenging one. Although, the topic area is large, the literature is just beginning to address the issue of gerontological curricula and thus it was difficult to assess what would be found in the schools today and what implications would be found for the future.

CHAPTER 2

LITERATURE REVIEW

The literature review examined pertinent articles and studies related to gerontological curricula in generic baccalaureate nursing programs in Canada and the United States. The literature review suggested the need for this study and assisted in development of the questionnaire.

The literature review was organized into five main sections. The first examined the changing demographics of the Canadian population and how aging of the population was effecting change in health care. The second section examined the development of gerontological nursing and the growth of research to determine how to improve nurses' attitudes and desires to work with the older client. The third section examined literature related to the requirements of gerontological nursing and discussed previous studies delineating essential gerontological content and how it should be presented. The fourth section explored issues surrounding the incorporation of gerontological content and experiences into generic baccalaureate nursing curricula.

The last section discussed Reed's "Rhythm of nursing education" (1987), a generic model used to explore the concepts of person, environment, nursing practice and health. From this, a specific model was developed by the author to explore gerontological nursing and the generic baccalaureate nursing programs and to guide discussion around the four nursing

concepts. The chapter concludes with a summary of the issues surrounding the need to increase gerontological nursing in Canadian generic baccalaureate nursing programs to enable nurses of the future to provide optimum care to the elderly in our society.

NEED for GERONTOLOGICAL NURSING

The Canadian population is aging and nurses are often the first health care professionals seniors turn to for advice and assistance. Therefore, it is essential that all nurses receive a basic education in gerontological nursing.

Changing Demographics in Society

In 1989, 2.7 million Canadians were 65 years of age or more. By 2021, one in every five Canadians will be 65 or older. By 2030, the Canadians over 65 years will triple 1989 levels (*National Advisory Council on Aging*, 1989). The senior population itself is growing older. The number of Canadians aged 75 or more has been growing at an annual rate of 3.5% or more during the 1980s. Some of these older Canadians will be better educated, healthier and wealthier than past generations and thus will be able to articulate their needs for better social and health services.

The health status of the elderly differs from that of the young in respect to both the occurrence and type of disease and disability. "Disability is any restriction or lack of ability to perform an activity in the manner or within the range

considered normal for a human being (Statistics Canada, 1988, p.1) and includes poor sight, hearing and decreased stamina. Most over 65 are not in need of constant care and are able to look after themselves. Unfortunately, as life expectancy increases so does the period of disability. This period of disability ends with increased concentration of acute care services before death. As age increases beyond 50 there is a marked rise in the incidence of disability -- particularly at the lower levels of severity -- and a rapid increase in severe incapacity beyond the age of 70 with a marked increase of health care services in the period just before death (Townsend, 1979, p.708).

With age, most elderly lose social power due to loss of occupational status and decreased health. Many may have little social status as a result of being a member of a minority group, or by being female of a different ethnic background. These factors contribute to loss of self esteem and ability to cope. Impairment and disability are closely related to occupational class and gender. Assessment of appropriate services to maintain health and independence is a complex process and is specific to the individual.

Use of Health Services by the Elderly

In 1984, Woods Gordon (CMA, [1984], p.14) projected percentage increases from 45%-118.8% in various health services utilization in Canada from the years 1981-2021. This increased utilization reflects the rise in numbers of older people in

society and the need for health care assistance as increasing age brings increasing disabilities.

Health Service	Percentage Increase
Long Term Care Facilities	118.8 %
Home Care Services	117.8 %
General & Allied Special Hospitals (Inpatient)	89.1 %
Mental Health Facilities	68.0 %
Physician Services	45.0 %

Increased utilization is noted in the large percentage increase in the services traditionally used by the elderly--long-term care facilities and home care services. The figures show increased use of acute and critical hospital beds. These data reflect Roos and Shapiro's findings in 1987 that, "twenty percent of the elderly are hospitalized in any given year and that a much smaller proportion (5%) consume about 60% of the hospital days used by all of the elderly persons in a one year period." (p. 646).

Social and cultural factors influence the use of health care resources. There are more females in the older population than men. Females are more apt to be poor and alone. Those with no family or social support structures are more likely to be in poor health and depressed. Inadequate nutrition, energy and mobility contribute to isolation, depression and other physical conditions. Mezey (1986) stated that "15% of older persons residing in the community and 50 - 70% of patients in nursing homes have major concommittant psychiatric disorders requiring interventions" (p.280).

As society changes and women join the work force, there are fewer family members to care for the older relatives. "It is likely the family will be less able to continue its caregiving role at current levels without outside help" (Walz & Blum, 1989, p. 4). This increases the demand for home care services. Some seniors develop long-term chronic disorders and need continuous assistance with daily living, resulting in institutionalized care.

The increased numbers of people over 65 in todays Canada are forcing the health care system to reexamine its objectives. "The nature of their health care needs and their rate of utilization of health services are shifting the balance of health care from acute care to chronic care. Caring, rather than just attempting to cure, is gaining new respect and support" (Walz & Blum, 1989, p. 5). Health care is being delivered in a variety of settings - acute and critical care institutions, long-term and chronic care facilities as well as maintenance programs to support the individual in the community and the home. This increases the complexity of systems responding to the health care needs of the elderly.

A person may be labeled 'old' according to their chronological age or their functional ability. Common terms include the "frail elderly" and the "healthy elderly". However, the elderly should not be viewed as a group but as distinct individuals with their own history, life experiences and responses to these events. Most elderly will experience relatively good health and enjoy a quality life. A smaller

proportion will not be so lucky. Nurses, therefore, should assess individuals as to how they function in the community, home and health care setting and as well should consider the individuals' perception of their own health.

Need for Gerontological Nursing

Changing demographics in Canadian society have made it necessary to include knowledge and experiences in gerontology in nurses' basic education to prepare them to work with older clients in all settings.

The Canadian Nurses Association (1987) stated that the nursing profession "exists in response to a need of society and holds ideals related to human health through out the life span."(p.ii). The American Nurses Association (1986a) is in agreement: "A complex society demands a system of nursing education that prepares nurses with the knowledge and skills they need to meet the changing health care needs of a diverse population" (p.20). Dier (1984) indicated that every faculty needs to take into consideration population demographics and characteristics in curriculum design. To do so means to continue work toward inclusion of content in gerontology in nursing undergraduate curricula for the preparation of the generalist in nursing.

DEVELOPMENT of GERONTOLOGICAL NURSING

Gerontology appeared as a field of interest amongst health professionals in the mid 1960s. The American Nurses' Association, Division of Geriatric Nursing Practice, developed

the first Standards of Practice for Geriatric Nursing in 1969. These were revised in 1976 and called the Standards of Gerontological Nursing Practice and were to be used with the generic standards for all areas of nursing practice. At that time, two nursing journals were started in the field of gerontological nursing to guide care and to recognize age as a normal life process. In the 1970s according to Benson (1982) the American Nurses Association and the National League of Nursing strongly recommended that gerontological nursing be strengthened in all nursing education programs.

In Canada, during the same decades, nursing has been slower to respond to the need for gerontological nursing. However, the last ten years has seen a tremendous growth in interest groups, associations, conferences and journals. The Canadian Gerontological Nurses Association began in 1981 and held its first annual conference in 1983. Canadian standards of gerontological nursing were published in 1986 - 1987 by the (Canadian) Gerontological Nursing Association and the Registered Nurses Association of Ontario. However, these have still not been accepted by all provincial bodies, and schools of nursing are not required to teach gerontological nursing in spite of the fact that they do have a mandate to prepare students to use the nursing process to care for clients in all phases of the life cycle. The Canadian Nurses Association in a report on *Nursing Contribution in Health Care for Older Adults* (1987) suggested that improvements in the care of the elderly depends on a requirement "that all nurses receive

gerontological nursing knowledge and skills to work within today's health care system " (CNA, 1987, p.16).

In the past, some argued there was not enough distinct gerontological content to warrant making it a special field of interest and practice. Gunter and Estes (1979) stated that, "curricular progress in the development of gerontic nursing has been hindered by a lack of faculty skilled in this area of work, by scarce teaching materials that concentrate specifically on the elderly and a lack of instructional methods" (p. 35). The first nursing text appeared in 1950 and research and information have increased since the mid 1960s. Generic and clinical nursing journals now publish research and articles on how to deliver care to this age group as it pervades all areas of health care. Health professionals are concerned with the influence this older age group is having on society and question how best to prepare their students to assist the older client. Although there is a wealth of information to draw on and include in baccalaureate programs, gerontological nursing education programs are still evolving.

Knowledge to Change Attitudes and Behavior

In the 1960s and 1970s, it was assumed by nurse educators and researchers that nurses' attitudes influenced their practice. Ageism is a form of social prejudice toward the elderly, and one that nursing students are said to reflect. Early studies focused on identifying factors that promoted negative attitudes toward the elderly so that these factors

could be removed by education. Campbell (1971) found all categories of nurses had negative attitudes toward the elderly. Gillis (1973) found that baccalaureate graduates had less positive attitudes toward the elderly than Licensed Practical Nurses. Brower (1985) found nurses had stereotypical attitudes, but showed that these changed for the better with experience and with the age of the nurse.

Nursing leaders persisted in the belief that students needed a knowledge base about the uniqueness of the older person in order to provide competent and appropriate care. Other research studies attempted to provide knowledge about the elderly to improve nurses' attitudes and to provide them with positive experiences by having them interview the well elderly before being introduced to the institutionalized elderly. (Tollett & Thornby, 1982; Campbell, 1971; DeLora and Moses, 1969; Mezey, 1986); but no correlation was found between students' attitudes toward the aged and the amount of gerontological content in the curriculum. "Information alone does not correlate with attitudes" (Robb & Malinzak, 1981, p.154). Although Robb (1979) found little relationship between attitudes and behavior, she concluded that "a person prepared as a health professional ought to be able to provide quality service regardless of her affect or attitude toward the elderly" (p. 50).

Effect of Faculty Role Models

Brower (1985) found that a positive role model influenced students' attitudes toward caring for the aged. Taft (1986) agreed:

> "A stimulating learning environment for gerontological nursing requires knowledgeable role models with positive attitudes toward the elderly. Such role models are scarce in nursing education and practice... This lack of interest in gerontological nursing is communicated to students and sends a nonverbal message that gerontological nursing is not valued" (p. 13).

Dier (1984) commented on the lack of positive role models in the field and the lack of well prepared teachers. Raichura (1985) recognized that "all learning occurs as a result of observing models and that new behaviors are more likely to be acquired if the role model is competent, powerful or of high status" (p.40). If this is so, having positive role models should be required if the student is to have a positive attitude toward the elderly and view gerontological nursing with enthusiasm.

Brower et al (1985) found few faculty of baccalaureate students were prepared at the graduate level in gerontology. The lack of meaningful clinical experiences is attributed to poor faculty preparation and interest. Williams (1984) stated that, "The first imperative is to develop the academic leadership that can do the research, advance the knowledge, educate all professionals in the health and human services fields about aging and provide the leadership in care that is required" (p.163).

A developing field first needs to prepare leaders who can influence the educational and clinical component required by the field. Faculty of a school of nursing should consist of positive role models who are educated at the Master's level of specialization in gerontology or preferably at the Doctoral level in order to stimulate research on how best to teach students to provide optimum gerontological nursing care.

Placement of Clinical Experiences

There has been much controversy in the literature as to when students should be exposed to well and ill elderly in their nursing program. Taft (1986) indicated that positive clinical experiences with the elderly are critical to curriculum development (p. 13). Various studies (Heller and Walsh, 1976; Robb, 1979; Strumpf and Mezey, 1980; Tollett and Adamson, 1982; Rankin and Burggraf, 1986; Greenhill and Baker, 1986) have shown that more positive attitudes are fostered if the student first meets healthy older clients before being introduced to the care of the sick aged in acute or long-term care facilities. One problem in the past was that nursing homes or chronic care facilities were used in the beginning of a student's program as a place to practise basic skills such as hygiene, communication and bed-making. Roberts and Powell (1978) described this approach as the "rape of geriatrics by the fundamentals nursing instructors" (p. 35). Ross (1985) encouraged nurse educators "to be committed to the purposeful and systematic selection of clinical learning experiences which

create the best fit between client selection and desired learning outcomes" (p. 568).

The student whose first experience is to care for an older institutionalized person will have few skills in communicating with those with cognitive and sensory losses, and little knowledge to understand the elderly person. This would be a better experience if it followed the classroom content on the elderly, as clinical experience is meant to assist the student to integrate knowledge.

The student needs to view the elderly in a wide variety of settings and in all states of health. Miriam Stewart (1984) reported on the use of nontraditional community clinical settings to meet the needs of baccalaureate students to prepare them to be liberally educated individuals. King and Cobb (1983) provided experiences with the well elderly in the community and the frail elderly in nursing homes. They found that the students' knowledge level increased and negative biases decreased as did their misconceptions about the elderly. Many possibilities for clinical experiences in gerontology exist as the elderly use a variety of care resources. The further advanced the student is in the program the more likely they are able to integrate and synthesize true gerontological nursing knowledge and apply it in a clinical environment.

Reif (1982) stated nurses who worked with the elderly were viewed as having low status, low salaries, limited career opportunities and unfavorable working conditions. The work has been described as repetitious and physically demanding.

Furthermore, there is a high prevalence of burn-out. Turnover is high according to Friedsam (1980) and contributes to lower occupational skill profiles which contribute to lower salaries and benefits which lead to turnover (In *Academic Gerontology: Dilemmas of the 1980s*). All these factors contribute to lack of qualified personnel to direct patient care and to supervise other levels of nurses (LPN, Nurses Aide) in developing appropriate plans of care.

Rowcall (1989) indicated that the third largest employed group of nurses (3,020) in British Columbia worked in the clinical area of geriatric/gerontological nursing, attributable to the increase in long-term and chronic care facilities providing employment. The question is whether this large group of geriatric/gerontological nurses, have been properly prepared to provide optimum care to the elderly. According to Penner, Ludenia and Mead (1984) nursing-home staff "were no better informed about general characteristics of the elderly than undergraduate sociology students"(p.112). Lack of knowledge can lead to frustration. Gerontological nursing can be challenging and rewarding for those with enough knowledge to properly assess, diagnose and initiate nursing interventions to assist the elderly to function. The 1983 Institute of Medicine's study on nursing and nursing education suggested such an outcome:

> If nursing education were to provide special preparation in all of the many aspects of geriatric care, licensed nurses would gain an understanding of the special needs, challenges and rewards of caring for the elderly, and thus become more attracted to employment in all settings where those people receive care" (Taft, 1986, p.11).

Summary

In a 1987 paper prepared by the Canadian Nurses Association in 1987 called "*The Nursing Contribution in Health Care for Older Adults*" concern is raised about the level of health care for older people. "At present, older people are receiving less than optimum nursing care.... There is a need to attract health care professionals to work with the elderly, strengthen gerontological content in nursing curricula, develop a group of teachers educated in the field and develop knowledge through research" (p. 3). This section has discussed these issues.

Gerontological nursing is a relatively new field of study and practice. The nursing profession (CNA, 1987) has recognized it as a requirement for student nurses to prepare them to work with the elderly who seek all forms of health care in a variety of settings. However, standards of care have not been adopted and little action has been taken by generic baccalaureate nursing programs to include gerontological content.

There has been an increase in research and writings on how the care of the older person varies from that of a younger adult. Yet, many nurses still do not care to work with this age group. One of the challenges is to improve attitudes toward this field of nursing. Educators have attempted to overcome poor attitudes by providing students with knowledge of the uniqueness of the elderly person and exposure to the well elderly as well as the disabled elderly cared for in

institutions. These experiences have proven to have value only to a limited number of students. Studies (Raichura & Riley,1985; Taft,1986; Brower, 1985) have identified lack of positive role models to foster empathetic attitudes toward the elderly in nursing students as an important contributing factor.

REQUIREMENTS of GERONTOLOGICAL NURSING

Gerontology is still struggling with whether or not it is a discipline and therefore what its knowledge base is. "Gerontology's status dilemma and the consequent dearth of curriculum guidelines have contributed to remarkably diverse programs. They range from broad, eclectic programs drawing upon multiple disciplines and professions to very narrowly conceived programs concentrated within a single discipline or profession." (Campbell, 1980, p.6).

Essential Content

Nineteen surveys and papers were examined to identify essential content in nursing gerontological curricula. Papers particularly useful were by Gunter and Estes (1979), Garrett (1986), the ANA's *Gerontological Nursing Curriculum Survey Analysis and Recommendations* (1986) and Johnson and Connelly (1990). All nineteen studies are discussed chronologically to gain perspective on the development of gerontological nursing and its incorporation into nursing curricula and to determine

if the findings of earlier studies have assisted in the development of later ones.

Moses and Lake (1968) are credited with the first landmark survey of gerontology in baccalaureate schools of nursing. They sent a questionnaire to each of the 150 National League for Nursing accredited baccalaureate programs in the United States and received a 92% response rate. Four questions were asked about gerontological content and its placement in the curriculum, one about research activities, one on student clinical choice following graduation and one on future plans for gerontology content. Only 12% of the schools indicated they taught courses whose main emphasis was gerontology and these courses focused on the long-term institutionalized elderly. Seventy-two percent of the schools who responded indicated that, on average, twelve hours of geriatric content was integrated into other specialty areas. Eighteen schools offered gerontology content under very broad topics that were largely covered by other disciplines, and only five schools indicated they would like to develop a specific gerontology course.

The other early gerontological nursing study is Gunter's and Estes's (1979) book on *Education for Gerontic Nursing*. They developed a gerontological nursing curricula for each level of nursing. "Recommended topics included the cultural context of aging, multidiscipline approaches to aging, dimensions of aging, functional losses and disability, psychosocial impairments, chronic disease and Gerontic nursing

methods and resources" (Gunter and Estes, p.76). The term **'gerontic'** was coined by these authors to refer to the application of gerontological concepts to nursing measures in care of the elderly. Although this work is cited in most gerontological nursing literature and is used as a basis for developing gerontological content, no nursing programs are reported which follow Gunter and Estes' model.

Campbell (1980) is the author of a joint research project sponsored by the Association for Gerontology in Higher Education and the Gerontology Society of America. The project had three areas of inquiry: 1) components of a basic core knowledge essential for all people working in the field of aging, 2) knowledge essential for clusters of professions in the biomedical sciences, and 3) knowledge essential for four professional fields, one of which is nursing. This study used the Delphi technique and took four years to complete. There were 87 respondents representing 15 professions including 14 nursing participants.

Identified core content included health, psychology, biology of aging, demography, sociology, environment and economics of aging. For baccalaureate nursing programs, 33 topics and 16 skills/approaches were identified by 90% of the multidisciplinary respondents and 79% of the nurses. Unfortunately, the nursing topics were ranked differently by members of other disciplines than the nurse respondents. Further, fourteen nurses is not a sufficient number to create confidence in the data or to generalize.

Tollett and Adamson (1982) used a *Geriatric and Gerontology Curriculum Content Opinionnaire* which consisted of 16 items and was distributed to students, faculty and practitioners. No specific topics were included, only that the content be focused. The practitioners in three types of health care settings in a Texas city preferred a focus on pathological content, the faculty in four baccalaureate nursing programs preferred normal changes due to aging and second semester students in these programs were split as to the focus of the gerontology content.

McPherson, Liss and McLeod (1983) represent three different professions at Ohio State University. They combined resources to identify key concepts in geriatrics/gerontology for curriculum development in the health professions. The project was funded by the Bureau of Health Professions to develop a model curriculum using a health care team approach. The structured interactive group method was used and included a variety of 'experts'.

The results are presented in tabular form and include eight basic concepts for interdisciplinary geriatrics/ gerontological education with approximately ten specific topic areas under each: 1) fundamentals of the aging process; 2) biological and physiological aspects of aging; 3) psychological norms of the aged and the aging process; 4) social and societal aspects related to the aged and the aging process; 5) changing responses to disease in the elderly; 6) essential pharmacology; 7) integrating and managing therapeutic

modalities for the aged; and 8) effective functioning of an interdisciplinary health care team.

Brower (1985), a pioneer researcher in gerontology and later editor of the Journal of Gerontological Nursing, developed a matrix conceptual framework for gerontological nursing to include normative aging, pathological aging, nursing content considerations and policy considerations. Her framework is valid but most schools incorporate content under their own nursing model or in a model for baccalaureate nursing.

Simson and Wilson (1985) conducted a survey of 131 four-year generic baccalaureate nursing programs to investigate the inclusion of "disease prevention, health promotion and aging in order to assist the nursing profession in planning and meeting the growing health care needs of the elderly population"(p.10).

A content analysis of the nursing schools' catalogues was conducted and a questionnaire was mailed to the heads of each nursing program. The return rate was 57%. Most programs recognized the need for more wellness-focused gerontological nursing, as all of the respondents recognized the need for prevention and health promotion education focusing on the aging population. This study discussed the findings in some detail but combined factors which contributed to confusion, for example, courses on 1) prevention, 2) aging, and 3) prevention/aging. The nine content areas which were categorized are too broad to be meaningful.

Edel (1986) documented the status of gerontological nursing curricula and the preparation of faculty. Questionnaires were mailed to 343 directors of generic baccalaureate nursing programs in the United States with a response rate of 57.4%. Characteristics of the curricula examined included items such as the integration of and amount of time devoted to gerontological content in the nursing program. The only topic referred to is growth and development and it is assumed that if the concept of aging is taught it would be in this course. The respondents were asked if their program contained a separate course in growth and development. Eighty-nine percent of those schools that answered said yes, but of these the average number of hours on aging was 8.7. Twenty-six percent had no aging content in their growth and development class. The study concluded that clinical experiences with the elderly were increasing but "gerontological content is inconsistent and generally quite meager"(p.30).

Two influential surveys published in 1986 were Garrett's study on baccalaureate nursing programs and the American Nurses Association survey of all levels of nursing programs.

Garrett (1986) mailed a questionnaire on *Gerontic Nursing Programs and Faculty* to 190 baccalaureate nursing programs across fifty states in the United States. She found gerontological topic areas to be included in 75.3% of the schools, but that it received much less emphasis than medical-surgical nursing. Thirteen general areas were included, with

physiological changes in the elderly being the most prevalent. This is a thorough study that explored teaching techniques, sequencing of gerontological content and clinical experiences. Unfortunately, much of the terminology is vague and the author spends half of the paper presenting her own viewpoints; however, the study reports that gerontological nursing is being included in 75% of the 143 schools which responded. This percentage is vastly increased from the 12% noted by Moses and Lake in 1969.

The American Nurses Association (1986) conducted a *Survey on Gerontological Nursing Curriculums* to determine content areas for Associate programs, Baccalaureate, Master's and Doctoral degrees. The major portion of the paper was on gerontological content areas in these four degree programs. Topics were listed under 16 content areas and the deans of the schools were asked to comment on how the topic was taught, in which course and whether it was taught in the classroom, practice area, or both. The most frequent topics taught for baccalaureate nursing programs were attitudes about older adults, chronic illness and nursing process. Nine issues were raised and recommendations made for further study. Two issues were recommended for further study: the lack of faculty preparation, and whether content should be integrated or taught in a specific or blocked unit. This study is frequently cited.

In 1987 the Registered Nurses Association of Ontario sponsored a survey of Ontario's schools of nursing at all levels and reported the results in "*The Report of the Older*

Persons Project". This is the most recent survey of a portion of Canada's nursing programs and received an 84% response rate. The questions were both open ended and closed. Topics under the headings: Content areas Related to the Care of the Elderly, and Clinical Nursing Problems were included in the questionnaire but no reference is made to them in the written report. The report concludes that most of the schools integrated the content.

Lee and Cody (1987) reviewed the literature to determine whether there was agreement on a core curriculum for gerontological nursing education. They found no consensus. They recommended Gunter's and Estes's (1979) curriculum model, but noted that no studies reported in the literature used the specific courses suggested by Gunter and Estes. Lee and Cody made recommendations for a systematic process of core-curriculum development and suggested topics that gerontological nursing education should address: geriatric nursing care; health care organization; financial, political, economic, and social context of health and aging; assertiveness and leadership training; and political awareness. These topics are quite broad and could be interpreted differently by each school of nursing.

Solon, Kilpatrick and Hill (1988) reported on a survey of six health professions conducted by the Bureau of Health Professions. Both post RN and generic baccalaureate nursing programs were included to represent nursing and there was a 65% response rate. Two questionnaires, consisting of seven

questions on gerontological content, were mailed to each of the deans of the schools asking them to complete one and another faculty member to complete the other questionnaire. The responses indicated that the schools integrated the gerontology content. Aging-related instruction accounted for 18% of the nursing program with more than half of this time spent in the clinical area. Most of the prelisted twenty aging-related topics were required by the nursing schools. This study indicated that there has been an increase in gerontological content in the past twenty years.

Ellis (1988) used an inquiry process to determine what educators in the health professions perceived to be hallmarks of good practice and effective education in geriatrics. Hallmark was defined as "a distinguishing feature or characteristic" (p.18). Trainees from five health disciplines (including nursing) representing two Geriatric Education Centers (Western New York and Delaware Valley) answered three open-ended questions on 1) the hallmarks of good geriatric care 2) the hallmarks of effective education in geriatrics and 3) what they considered the most important issues in geriatric care now and in the foreseeable future. Only those hallmarks listed as important by more than fifty percent of the respondents in one or more disciplines were included in the study.

The two groups agreed that care consisted of having an ability to communicate positively with the elderly and to show concern for the elderly, but there was no agreement on

effective education in gerontology. This study is the first documented study which compares regional programs.

Hogstel (1988) surveyed 39 senior students' opinions about the amount and type of gerontological nursing in her own school's curriculum. The students were asked to comment on whether 17 content items were adequately covered in the curricula. Nine topics were considered to be lacking, and only four were considered to be adequately covered: nutrition in the elderly; cancer; biological changes; and cardiovascular disease. The conclusion was that more sociocultural and environmental factors needed to be included. Hogstel included a list of suggested gerontological nursing content topics in her article under three categories: sociocultural, physiological, and medical diagnosis; and stated that more nurse educators and nursing students were beginning to recognize the need for increasing gerontological nursing content in the curriculum.

Leinbach (1987/1988) conducted a statewide survey of practising gerontologists to determine their perceptions of the educational needs of gerontologists in a variety of disciplines. A closed-ended questionnaire was developed and sent to 1,100 participants with a 50% response rate. A list of "very useful" education/training topics was developed which differed from topics found by reviewing the literature.

Malliarkis and Heine (1990) asked if gerontological content and experiences were included in baccalaureate nursing programs, to what extent and what the qualifications of faculty

were? They developed a questionnaire using Torres and Stanton's Curriculum Process Model. The questionnaires were sent to 104 deans of baccalaureate nursing programs accredited by the National League of Nursing in 11 Southeastern states. There was only a 40% response rate. Ten major content areas of gerontological nursing, with subtopics, were identified in the questionnaire. The majority (90%) of the schools indicated all of the major content areas were included in the curriculum, and that "more than half of the gerontological nursing subtopics were included by a majority of the schools in this study" (p.6). The authors refer to a table of the topics, but all that is included in the article is a diagram of the conceptual framework. There is no other reference to the specific topics or to the frequency with which they were chosen by the respondents. This was the first paper to use a curriculum model to analyze gerontological curricula. Unfortunately, its response rate was too low to give it validity and the results were not illustrated in table format.

Schlepp (1990) reviewed literature and interviewed faculty of schools of nursing to summarize issues surrounding gerontological content. Topic areas included in schools of nursing were theories of aging, normal developmental changes, coping mechanisms, nutrition, and anatomical and physiological changes. Schlepp stressed that the term *changes* should be emphasized instead of *losses*.

In 1990 a *Nursing and Gerontology: Status Report*

was sponsored by the Association for Gerontology in Higher Education, funded by the Administration on Aging and reported by Mary Ann Johnson and J. Richard Connelly. This report discussed curriculum, faculty, and professional issues that hinder incorporation of gerontological content in nursing programs "despite more than five decades of the nursing profession's recognition of the need" (p. 9).

This is the most recent report on gerontological content by a large professional group and raises some very pertinent and important issues. Johnson and Connelly suggested outcome objectives for the baccalaureate-prepared nurse under ten curriculum topic headings: theories of aging; changes of aging; common problems of aging; functional abilities; public policy; health maintenance and promotion; long-term care; ethics and attitude; cultural variation; and professional development.

There has been a noted increase in gerontological content since Moses and Lake performed their study in 1968. When the gerontological client is viewed as a holistic being who functions in a larger environment, the topic potential is great and complex.

Skills and Approaches

McConnell (1988) indicated that "gerontological nurses should be skillful in applying generic nursing methods to care for the aged" (p. 37). Several areas are suggested: communication techniques considering sensory losses; cognitive deficits; multidimensional assessments; principles of

rehabilitation and palliation and topics under health promotion; risk management and advocacy of the patient. Davis (1980) indicated that additional roles for the gerontological nurse such as "caregiver, manager, health promoter, supervisor, teacher, and counselor, as well as those elements involved in health and illness screening" (p.50) should be included.

Specific nursing skills in the care of the elderly include the ability to operate special hygienic and mobility aides. These approaches and skills were found to be of importance in Ellis's (1988) study as well as a knowledge of community resources and coordination of services.

Sequencing of Content and Experiences

"According to Piaget, the overall movement in cognitive development is from a sensorimotor stage to concrete operations to formal or abstract operations" (Smith, 1981, p.577). From this perspective sensorimotor skills and concrete content should precede more abstract content. Smith raised an interesting point when she asked if health was a concrete concept (1981, p.578). She continued to say since health is frequently presented early in a nursing program, if it is a concrete concept it should be presented as a global concept first, then articulated with other content and reintroduced near the end of the program when hierarchic integration occurs. Reed (1987) indicated that Werner's (1947) developmental principles can be applied to learning.

> "Whether the content area is liberal arts, general studies, or nursing, this principle dictates that learning moves from general to specific, concrete to abstract, simple to complex. The goal of learning is not only indepth knowledge in a specific area (specialization), but the transformation of this knowledge of detailed precision into an organized system of theoretical and practical principles that can be generalized to many situations (hierarchial integration)" (Reed, 1987, p.38).

Before introducing gerontology into a curriculum, a picture of the well elderly is needed. What are the normal patterns of aging? Who are the elderly in society? What are the effects of an elderly population on the political and legal systems in society? The well elderly are scrutinized and followed by examining the physical, psychological and cultural needs that arise from the normal aging process through the process of becoming less functional, if afflicted by disease or loss, until death. This also follows a pattern of development and the principles of hierarchal learning.

Knowledge from many areas should be introduced and integrated. A concept of the well elderly is a good beginning point to assist in changing attitudes, increase understanding and to assist in establishing goals for the functionally disabled elderly.

"Clinical experiences are viewed as complementary to classroom learning and as essential in preparing qualified professional practitioners" (Bevil and Gross, 1981, p.658). "Clinical experiences can be planned wherever there are older people, depending upon whether the focus of the course is acute care, chronic care, long-term care, or wellness" (Hogstel, 1988, p.17). Traditionally, generic nursing students had

experiences in the hospital and public health departments, but this has been changing in the last ten years as hospital space and time has become limited. A study by Graham and Gleit in 1981 showed that 80 percent of clinical usage was concentrated in seven settings. "Secondary care settings, homes, and health departments were used more frequently than any other sites, while the next most often used sites were outpatient departments, tertiary care settings, schools and community health agencies"(p.292). Other areas suggested by Hogstel were diagnostic centers, adult day care centers, home health agencies, retirement centers, churches and any another organization whose goal is to meet the needs of the elderly. This attests to the wide variety of experiences that should be offered the student to make them aware of the many facets of the elderly in our society.

Summary

A review of nineteen surveys and reports conducted from 1968-1990 revealed there was little consensus on gerontological content to be included in a generic baccalaureate nursing program. Some indicated a curriculum should address attitudes toward the elderly while others taught physical changes due to aging. It is difficult to compare the results as some surveys used broad topic areas and others were more specific.

There was also no consensus on the sequencing of material and related experiences, but most agreed there should be a greater focus on gerontology than currently exists in their

programs. Most schools integrated larger concepts such as the "Elderly in Society" into interdisciplinary courses, while only a few required a specific course on gerontological skills and approaches. These courses received fewer hours than other disciplines within nursing.

As society becomes aware of the impact of the elderly client on the health care system, more support is given to the need to include gerontological content in baccalaureate nursing programs. Yet faculty are in a quandry as to how best to present gerontological material. There is a need for a study such as this to identify the essential core curriculum and for discussion on how it could be incorporated into existing curricula.

ISSUES of GERONTOLOGICAL CURRICULUM DEVELOPMENT

This section explored limitations surrounding the development of a gerontological nursing curriculum and the goals of the generic baccalaureate nursing program.

Goals of Degree Program

In 1982, the Board of Directors of the Canadian Nurses Association endorsed the decision that "the baccalaureate degree be the minimum educational qualification for entry to the practice of nursing by the year 2000" (Kerr & McPhail, 1988, p. 260). This means that graduates from Canadian schools of nursing in the year 2000 and after must have a baccalaureate degree in nursing to enter the practice of nursing. The

rationale stated is that this form of education will assist the student to stay abreast of the changing nature of practice and the knowledge necessary to engage in practice. This increased qualification is meant to increase the status of nursing, raise its public image and encourage the use of research as the basis for practice. A practical issue is that nursing is forced to increase the education of its students as, "the advances in the health sciences have been such that today's programs of basic nursing education are hard pressed to offer curricula that address the depth and breadth of theoretical content and related clinical experiences for safe and effective practice" (Kerr & McPhail, 1988, p.262).

The goal of the educational programs is to prepare a liberally educated professional who will function in a work setting as an advanced beginner. Traditionally the student had been prepared to work in settings organized around medical clinical specialities such as Medicine, Surgery, Pediatrics, Psychiatry, Obstetrics or Community Health. Gerontology is not easily defined into a clinical or system-based education program. Its patients or clients pervade all types of health care services, making gerontology a necessary component of a basic generic education.

Limitations Placed on the Nursing Program

To develop a curriculum requires consideration of many factors: the requirements of the university, community and profession; and the availability of human and material

resources such as quality of faculty, school environment and availability of clinical resources.

Each university has its own mission statement. Faculty members are to work in accord with these statements and the nursing programs go one step further by preparing students to meet nursing's professional and ethical standards. In Canada, university nursing programs voluntarily agree to accreditation by the Canadian Association of University Schools of Nursing (CAUSN). Graduates should be familiar with any nursing groups or specialties standards of care, for example, the Gerontological Nursing Standards developed in 1987-1988.

The quality of the faculty that guides a nursing program is dependent on individual interests, academic preparation and clinical, teaching and research skills. The members of the faculty should have similar philosophies of nursing; they should work well as a team. To incorporate gerontological content into a nursing program requires qualified and academically prepared faculty in gerontology.

Another issue to be addressed is the variety of pertinent nursing experiences in a generic nursing program. Specialty areas are vying for students' attention to attract them to work in their particular field of nursing. If gerontology, a relatively new field of nursing, is included other clinical areas may have to be decreased. According to an assessment of population statistics, there should be less maternal and child care. Yet this is an area that has high appeal to both faculty and students and remains a societal need. To date some

gerontological content has been slipped into the nursing programs, but the literature has shown it has not been taught consistently in an integrated manner or given sufficient time in a specific course to influence the students nursing care performance or desire to work in this field.

Evoking Change in the Curriculum

The implementation of gerontology into a curriculum evokes change. The object of curriculum change always has as its focal point altering some characteristics of the educational program; to shape the characteristics, attitudes, knowledges and skills of its students (Bevis & Clayton, 1988, p.14). Nursing education decisions are generally made in nursing schools by administrators or faculty representatives on curriculum committees. Then a process of negotiation begins to reach a concensus. Bevis and Clayton (1988) say that this undertaking is "so difficult and onerous that what is finally agreed upon is watered down into platitudes that seldom have the strong commitment of faculty" (p. 15). They urge university schools to be more flexible in accepting a variety of ideas and feelings, to question the assumptions on which behaviorist theory is based, and to deinstitutionalize the curriculum-development process to stay in step with the current context of nursing. They also recommend frequent review of the curriculum to alter its structure to reflect the trends of society.

Brower (1981) commented on the lack of administrative support for gerontological nursing. Only by administrators insisting that curricula be reviewed to see if they are preparing students to meet the needs of those using the health care system will this problem be addressed. Then they should hire faculty with interest and preparation in gerontology and offer continuing education to present staff. These steps will influence students' gerontological knowledge base and attitudes toward the elderly.

Other barriers to the development of gerontological content in schools of nursing have been the slow response of the professional nursing associations and licensing bodies. Specific questions on the licensing examinations regarding gerontology would force faculty to teach it. Gerontological interest groups, composed of individuals working with older clients, are attempting to influence the provincial bodies to accept their standards. This would necessitate curriculum planners to incorporate the gerontological nursing standards into generic nursing curricula.

Organization of Curricula

The advantages and disadvantages of an integrated or separate program on gerontology have been debated with feeling for some time. In 1985, Brower et al stated "there is little research to support the adoption of either design in curriculum implementation" (p.46). Integration means "where-ever development occurs it proceeds from a state of relative

globality and lack of differentiation to a state of increasing differentiation, articulation, and hierarchic integration." (Smith, 1981, p.577). Integration requires a great deal of time, energy and organization and can be easily lost in the curriculum, particularly if taught by faculty unenthusiastic toward gerontology. Hipps (1983), Smith (1981) and Reed (1987) stated integration of content contributes to increased knowledge and cultivation of judgement. Reed indicated that much of the sociocultural content could be integrated into other courses such as growth and development, medical - surgical nursing, psychiatric nursing and community health.

However, Hogstel (1988) stated "that a separate course in gerontological nursing would help to introduce and emphasize the essential components of this specialty" (p.16). This supports the point that the chronically ill older person is so complex that students are required to integrate all their knowledge and apply special techniques and approaches to provide adequate care. This could be accomplished by a specific course in gerontology.

Brower et al in 1985 conducted a study comparing two university schools of nursing which had different conceptual frameworks and treated the gerontological content differently. One integrated the content and the other taught it in a blocked course. Both courses improved the students' attitudes toward the elderly, but when the students were asked if they would like to work with the elderly only the school with the integrated program scored positively. On the cognitive test,

however, students from the blocked program scored significantly higher than the students from the integrated program. This success may be due to the fact that the study was conducted immediately after the completion of the separate gerontology course.

There is little literature on specific teaching techniques in gerontology. The basic assumptions of adult education should be used, plus a variety of techniques. Simulation games are recommended (Rankin & Burggraf, 1986) to experience the feeling of loss of function and control over one's life and self-learning modules allow the learner to work at their own pace in addition to the conventional lecture and seminar method. Discussions in the classroom can occur using the didactic method to dissipate negative attitudes.

Summary

The goal of a generic baccalaureate nursing program is the preparation of a liberally educated professional to meet the demands of society. The curricula of these schools is influenced by demands of the public, university, administration and nursing profession.

One of the difficulties is to decide how much time will be devoted to the liberal arts, nursing principles and introductory preparation to nursing specialties. To increase attention to a new field of study, such as gerontology, necessitates reviewing the curriculum to determine what to

include, how many hours to allott to its specific content area and the best sequence of content and experiences.

One issue that is debated is whether gerontological content should be integrated throughout a program or be taught in a specific course. The literature suggested that some of the knowledge which contributes to an understanding of the elderly in society be integrated, but that separate time be devoted to specific gerontological nursing skills and approaches near the end of the nursing program to help the student integrate the complexities of the care of the elderly client.

To resolve the issue of how and when to include gerontological content into curricula, schools of nursing often begin by accepting a conceptual framework. This framework will guide their decisions and assist with these issues.

CONCEPTUAL FRAMEWORK

Several factors should be considered before gerontological content can be included in a generic baccalaureate nursing program. They include 1) the components of gerontological nursing; 2) the faculties philosophies on health and illness; 3) the nursing model of the school; and 4) the curriculum model used by the school of nursing. All should be incorporated into a conceptual framework in which all four of these factors are blended into a cohesive whole to shape the curriculum of a generic baccalaureate nursing program. This conceptual framework assists in the formation of a generic baccalaureate nursing curriculum foundation.

Conceptual Framework and Nursing Models

A conceptual framework is a set of concepts that guides decisions about what to assess and diagnose, how to intervene, and what to evaluate." (McConnell, 1988, p. 6). It is a structure to help select the parts to make a cohesive whole. A curriculum conceptual framework guides decisions on such issues as essential content and the proper placement of that content. Chater (1984) indicated that "curriculum, like nursing borrows from a variety of basic sciences and reality sources, so the framework will be eclectic" (p.428) and the framework should be referred to as conceptual not theoretical. The term conceptual framework of gerontological nursing in a baccalaureate program is used.

Conceptual frameworks have been illustrated by a wide variety of nursing models. These will be briefly summarized and then the four concepts of nursing will be discussed as the basis for nursing, gerontological nursing and curriculum design for a generic baccalaureate nursing program.

Many definitions have been developed to define nursing. The Canadian Nurses Association stated that

> "Nursing practice can be defined generally as a dynamic, caring, helping relationship in which the nurse assists the client to achieve and maintain optimal health. The nurse fulfills this purpose by applying knowledge and skills from nursing and related fields using the nursing process, the substance of which is determined by a conceptual model(s) for nursing" (1987, p.iii).

The document goes on to say that standards for nursing practice must respect the freedom of informed choice with regard to the selection of a conceptual model(s) to be used in

a given setting. This is why each nursing program is different. The philosophy of the program is portrayed by the faculty's choice of nursing model. The choice of model will be influenced by the previous education and interests of those making the decision, as well as their philosophy of the individual, environment, nursing and health.

Flaskerud and Halloran (1980) categorized nursing models into two categories: Partial-Focus on Person-Environment Interaction, and Total-Focus on Person-Environment Interaction (p.4). In the first type, Partial-Focus Interaction, the nurse focuses the activity on the individual and on assisting that person to interact with his or her environment. Examples of nursing models that fit this category include Orem's Self-Care model, Henderson's Needs model and Orlando's Interaction model. The Total-Focus on Person-Environment Interaction models describe the nursing activity as managing the environment so that individuals can adapt to changes in the environment or themselves. Nursing models that exemplify this theory include Levine's Conservation model, Roy's Adaptive model and Roger's Hemodynamic model.

Nursing Concepts

When reviewing a variety of nursing models, it becomes apparent that although the focus of the nursing activity may vary there are commonalties. Torres and Yura (1975) identified four concepts that appeared in all models used by baccalaureate schools of nursing in a National League of Nursing survey:

man/person; society/environment; nursing; and health. Fawcett (1984) considered these concepts to be essential units of nursing and since that time they have been generally accepted as the "four key concepts of the discipline" (Batra, 1987, p.191). Briefly, the four concepts are defined as follows:

Person: "a holistic being composed of biological, psychological and sociocultural needs and is the recipient of nursing action. The person may be ill, healthy or in both states" (Fluskerud and Hallaran 1980, p.3).

Environment: "a source of or an influence on the health or illness of the person. Environment interacts with a person or coexists with a person" (Flaskerud and Hollaran, 1980, p.3).

Nursing: management by nurses of "the interaction between the patient and the environment to promote healing or health" (Flaskerud and Hollaran, 1980, p.3)

Health: a state characterized by "purposeful integrated functioning in the environment, and including biological, psychological, and social well-being, not merely the absence of disease" (McConnell, 1988, p.24)

There is debate as to whether environment shapes the individual or the individual shapes the environment around them. Do individuals accept and respond to the environment they find themselves in or can they use inner resources and energy to shape the environment around them to make it appropriate for their needs? How this dilemma is resolved influences the person's perception of health. Smith (1983)

classifies health into four distinctive models which are characteristic of the health-illness continuum.

1). Clinical model. Health-extreme: absence of signs or symptoms of disease or disability as defined by medical science; illness-extreme: conspicuous presence of these signs and symptoms.

2). Role-performance model. Health-extreme: performance of social roles with maximum expected output; illness-extreme: failure in performance of role.

3). Adaptive model. Health extreme: the organism maintains flexible adaptation to the environment, interacts with environment with maximum advantage; illness-extreme: alienation of the organism from environment, failure of self-corrective responses.

4). Eudaimonistic model. Health-extreme: exuberant well-being; illness-extreme: enervation, languishing debility (p.31).

The first type refers to the disease-oriented model of health care; the second implies more attention to the occupational health, while the third focuses on the role of public health. The fourth type, or eudaimonistic model, "would foster community health programs geared toward fulfilling the basic human needs as described by Maslow and associated with physical and social welfare, safety, and self-fulfillment." (p.32).

This latter model of health views the person as a holistic being who strives for complete development of potentials, and is a model applicable to care of the elderly. However, this concept of health may not be accepted by a particular nursing school's faculty, whose perception of health influences the content included in the curriculum.

GERONTOLOGICAL NURSING

This section describes the knowledge base of gerontological nursing and discusses its application using the conceptual framework of the four concepts of nursing.

Gunter and Estes (1979) developed a gerontological model which draws from the biological, physical and behavioral sciences to depict the knowledge base of gerontological nursing. The knowledge base of nursing consists of health/illness, nursing practice and research. The science of gerontology provides knowledge gained from research on aging. These combine to form the basis of nursing gerontology involving the interaction of health, aging and illness and modified nursing methods. Gunter and Estes refer to **gerontic** nursing as, "the application of this combined nursing knowledge and implementation of appropriate nursing methods toward the aged population or client" (1979, p.38). Although the term **gerontic** is not commonly used today, the concepts help frame a perception of gerontological nursing which includes assessment of the practise situation and the application of appropriate nursing techniques based on knowledge of aging and nursing.

Person

"Research in the areas of gerontological nursing, gerontology, and geriatrics has demonstrated the uniqueness of the aged client with regard to health concerns and needs, normal development as well as response to disease" (Brower et al, 1985, p.46). As the older person ages, some system may

malfunction causing more stress on the other aspects of the being. An individual whose reserves weaken with age and with changes may not be able to maintain a state of homeostasis or well-being. Yet with either social or health supports, such individuals may continue to be functional and live contented lives. The goal for the elderly is to reach fulfillment.

The older person is a survivor and should be viewed as a person with a distinctive life history that shapes his or her being and who is capable of further growth in an attempt to be at peace before death. "Each older person is unique as a consequence of the dynamic interplay of all of life experiences including physical and mental status, emotional attributes, cultural heritage, family constellation and relationships, economic and educational circumstances, social and spiritual values" (Gerontological Nurses Association, 1987, p.5). The older age group is the most heterogeneous of any social group as their reactions to life experiences are so varied.

Environment

"Individuals of all ages require a sense of mastery over their environment in order to minimize anxiety and stress and feel secure" (Canadian Gerontological Nurses Association, 1987, p.5). As the number of elderly persons increase, they affect the policies adopted by politicians, legal decisions made regarding health ethics and quality of life, and social and welfare policies. It is a concern of society that the elderly have income to support themselves, that they be properly

housed, and have access to health care. Social pathology which affects the elderly includes "problems such as drugs, alcoholism, violence, accidents, and broken families" (Bergman, 1986, p.110). These are issues the gerontology nurse should recognize and assess.

The elderly live in a variety of housing which should be appropriate to their level of activity and provide a safe, secure environment. As the elderly's mental and physical condition changes, the environment may have to change. If the change necessitates leaving their own home, it compounds the loss of control with loss of friends and neighborhoods. It also requires adjustment to a new setting and new interactions.

Nursing Practice

"Gerontological nursing is a specialty that focuses on enhancing the quality of life for the older person in community and institutional settings. The goal of gerontological nursing is to promote optimal health in older adults" (Gerontological Nurses Association, 1987, p.3). The four main goals of gerontological nursing are to

1. Increase health-conducive behaviors in the aged
2. Minimize and compensate for health-related losses and impairments of aging
3. Provide comfort and substance through the distressing and debilitating events of aging, including death and dying
4. Facilitate the diagnosis, palliation and treatment of disease in the aged. (Gunter and Estes, 1979, p.91)

The gerontological nurse should promote health, provide risk-management and be advocates for their clients. This requires working with an interdisciplinary team to assess the

elderly, inquire into their past and yet respect their right to autonomy. Once clients are determined the nurse's role includes treating them with respect, educating them as to health concerns and planning, with the client, alterations in their environment, lifestyle or health care so they may reach their optimum potential. The nurse should be able to communicate effectively with those who have sensory or mental deficits, applying appropriate gerontological approaches. The nurse should also be able to direct all levels of nursing care, work well in an interdisciplinary team and act as a positive role model for other nurses.

An important aspect of nursing practice is assessment of the environment for the older person. This includes assessing the appropriateness of living conditions, life style, interests, ability to perform personal care activities as well as aids to daily living. For those in health care settings, the nurse should provide a safe environment, effectively using mobility and hygienic aids while allowing the older person to make decisions and be in control. The environment of the elderly is very complex and varied. A nurse should be prepared to apply gerontology knowledge and techniques in a variety of settings and enjoy the challenge of gerontological nursing.

Health

Health is perceived differently by each older person. For some it means living a full and active life. Perhaps they will be called YEEPIES - Youthful, Energetic Elderly People Involved

in Everything (Golant, 1988, p.13). For others, it will mean a slower, stress-free life style. Those with chronic illnesses may consider health to be freedom from pain and the ability to mobilize. A person's perception of health will affect the lifestyle they choose to live, the risks they choose to take and their sense of well-being. What the older person perceives health to be should be respected by the nurse and others who care for the client.

The eudaismonic health-illness component best exemplifies health in the older person, as it describes health as an ongoing changing state of being which leads to a sense of wellness. This state of wellness is whatever the person believes it to be and is not measured against any other standards.

GENERIC BACCALAUREATE NURSING

Generic baccalaureate nursing is a four-year university program which prepares students to be nurses. Its goal is to produce a graduate with a broad knowledge base in the liberal arts and nursing. By using the nursing process the student can adapt knowledge and skills to work as a beginning practitioner in a variety of health care settings. It is anticipated that new graduates would receive a proper orientation program applicable to the job before having the confidence to function on their own.

Nursing curriculum is shaped by the schools conceptual framework or model. This is often the one the students adopt for the rest of their working career. When gerontology content

is introduced into a curriculum, it should function under the already existing framework or influence the school to adapt its conceptual framework.

The conceptual framework used in this study for a generic baccalaureate nursing program is one developed by Reed (1987). Reed used the four concepts of nursing (person, environment, nursing and health) and applied them to a baccalaureate nursing curriculum. Reed supports a developmentalist's philosophy and an eudaimonistic concept of health. Her model (Figure 1) was inspired by Whitehead's (1929) theory on the rhythm of education and Werner's (1947) orthogenetic or developmental principle as applied to the learner. It incorporates the ideas that students progress through cycles of learning until synthesis is reached "in a mastery of knowledge and wisdom" (p.38). The goal of learning is not only indepth knowledge but the transformation of it into an organized system of theoretical and practical principles that can be generalized to many situations.

Rhythm refers to the purposeful movement between liberal arts and nursing studies that fosters a developmentally maturing level of learning. Reed's original model has been modified to assist with a framework for gerontological content in a generic baccalaureate nursing program. (Figure 2).

Person

In the context of a school of nursing, person applies to the student. The generic baccalaureate student is a young

Figure 1

Reed's "Rhythm of nursing education" model (1987).

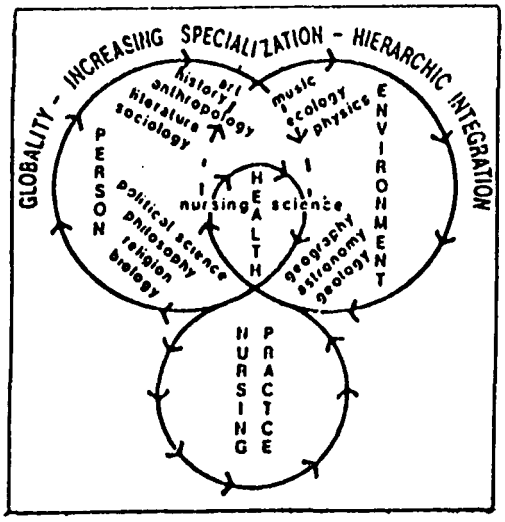
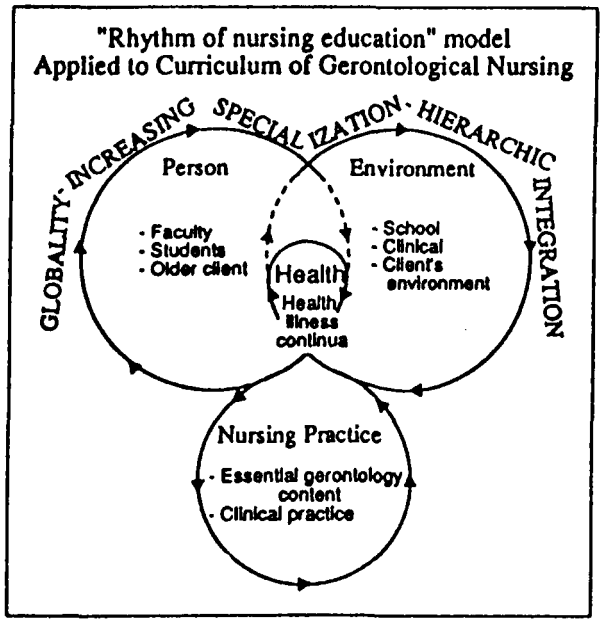


Figure 2

"Gerontological curricula in generic baccalaureate nursing programs" model (Earthy, 1991).



adult, generally female. By receiving a broad base in the liberal arts in the first two years of the program, the student is able to mature intellectually yet accumulate knowledge and experiences that can assist in making humanitarian judgements. This student could be exposed to the social effects of the aging population, normal psychological and physical changes related to aging and the subsequent pathologies. Foremost, the faculty has an obligation to provide positive role models in gerontology and to be enthusiastic about their content area. The students should have the opportunity to express themselves about their perceptions of the elderly and their attitude about caring for them. By using a variety of teaching methods (simulation games, experience with well elderly before the chronically ill) the student should have a positive attitude about the elderly client.

Environment

This refers to the learning environment and the trust that should develop between the faculty and students so that free exchange of ideas can occur. It also refers to the comfort of the physical environment with appropriate learning resources. For nursing students it encompasses learning about settings where nursing of the client occurs.

In relation to gerontological nursing, the student should have an opportunity to study demographics of society and how this affects a nation's goals and economy. Further, discussion could occur about the effect of grey power on politicians and

public policy. The nursing student also needs experience with the elderly in their natural and health care settings.

Nursing Practice

In Reed's model this dimension refers to the students' previous knowledge as applied to persons receiving health or social assistance. She cites examples of combining a knowledge of art with the scientific evidence to design a therapeutic environment. The nursing practice provides an opportunity to apply, practice and synthesize all previous learning and should assist the client, the elderly, to reach a state of well-being.

Health

The central circle in this fluid and flexible model is health. "It is in their links to health that the general concepts of person, environment and practice acquire the unique perspective of nursing for the learner" (Reed, 1987, p.39). The student nurse should recognize individual perceptions of health, accept them and be creative in assisting the elderly to meet their health goals.

Reed's conceptual model of a curriculum is circular as compared to the old Tyler linear medical curriculum framework (1950). It is more elastic and will allow for changes in health care needs and thus the curriculum can be easily altered to prepare nurses for the future. It is helpful having a visual perception of the four nursing concepts and the way they influence the parts and whole of a generic baccalaureate

nursing program which incorporates gerontological nursing education and practice.

Summary

A school of nursing may find a conceptual framework useful to visualize how the parts of the curriculum will be integrated to meet the goals of the program. The overall goal is to adequately prepare the nursing student to work as a competent nurse to meet the health care needs of the population. This paper chose to use the four concepts of nursing as a framework to view the student/client; environment of the school, health settings and society; nursing and gerontological nursing; health-the perception of illness and/or health.

CONCLUSION

Gerontological nursing is a relatively new field. The demographics of society and the uniqueness of the older population, who are the greatest users of health care, are forcing the nursing profession to recognize the need to prepare its students and future leaders to be knowledgeable about the older person and how best to assist them to reach optimal health.

However, many factors are involved when trying to change a nursing curriculum. It is a slow process requiring study and negotiation. It is influenced by faculties' knowledge and interests. To date there are few faculty members who possess gerontological knowledge or interest in the field.

interests. To date there are few faculty members who possess gerontological knowledge or interest in the field.

There have been nineteen surveys conducted since 1968 to identify essential gerontological content for generic nursing students and their findings were varied and difficult to compare. None of the studies recommended the amount of time to be spent on gerontological nursing. A few studies explored whether content should be integrated or included in a specific gerontology course but these did not reach any concensus. Sequencing of content is often influenced by availability of course offerings and clinical settings, not preplanned supporting experiences related to the knowledge content presented in class. Reed (1987) recommended global concepts, be presented at the beginning of the program and readdressed at the end of the program to assist with hierarchial integration. This could be a guideline for establishing learning experiences.

These issues were further explored in this study. The opinions of reputational "experts" were compared and contrasted with what is actually occurring in the schools and what is recommended in the literature. The literature review assisted in development of the questionnaire, discussion of the issues and formulation of a conceptual framework for gerontological curricula in generic baccalaureate nursing programs.

CHAPTER 3

METHODOLOGY

The purpose of this study was to survey generic baccalaureate nursing schools and the opinions of reputational "experts" regarding gerontological curricula organization. This study used a survey methodology to determine the present status of gerontological nursing in Canadian generic baccalaureate nursing programs and the gerontology curricula recommended by reputational "experts" in gerontological nursing.

PLAN of STUDY

The study used a mailed questionnaire methodology with two samples. This is a method concerned with the gathering of opinions and data which help to answer the question 'what is' with some explanation. As no previous study on gerontology programs in nursing has been conducted in Canada, this type of methodology was believed suitable.

Two groups of nursing professionals were selected to participate: deans/directors of generic baccalaureate nursing programs in Canada and reputational "experts" in the field of nursing gerontology. Each respondent completed a questionnaire about gerontological content and curricula in the schools of nursing and required of nurse graduates. They were also asked profile information about their school or themselves. The results of the school questionnaire were compared and contrasted with the opinions of the reputational "experts" and with literature reviewed.

Fourteen specific questions guided the research:

1. What health-illness continua guide the schools' curricula and the "experts'" philosphy?

2. What nursing models are used by the schools and the "experts"?

3. Should gerontological content be taught in an integrated manner throughout the program, partially integrated in nursing courses or in required or elective specific gerontology courses in these programs?

4. Are curriculum changes planned to accommodate gerontological nursing content in generic baccalaureate nursing programs?

5. Are faculty in generic schools of nursing academically prepared to teach gerontological content by having a graduate degree with a gerontology focus?

6. What percentage of students choose a gerontology practicum in their last year of the program?

7. Which gerontological topics are best taught in an integrated manner, in specific nursing courses or by another discipline? What topics are most likely elective course options?

8. In what years of the program should the gerontological topics be taught?

9. What is essential gerontological content in generic baccalaureate nursing programs?

10. Should patient problems and care techniques, commonly found in the elderly, be taught in a didactic manner, in the

clinical area as the situation arises or through a combination of both?

11. Should patient problems and care techniques of the elderly be taught in required or elective nursing courses?

12. How many clinical hours are spent in gerontology in comparison to four other nursing clinical experiences?

13. What clinical resources are used for the gerontological clinical experience and in what year of the program do they occur?

14. According to the reputational "experts'", what gerontology clinical experiences should be used for clinical experience and for what purpose?

STUDY SAMPLE

The population consisted of two groups of professional nurses with the total sample consisting of fifty-three personnel. The first group consisted of deans/directors, or their designate, of each of the twenty-two generic baccalaureate nursing programs in Canada. This list was supplied by the Canadian Association of University Schools of Nursing (CAUSN). The second group consisted of thirty-one reputational "experts" in the field of gerontological nursing. Each provincial president of the Canadian Gerontological Nurses Practice Group was contacted and asked to submit two to three names from their province. The reputational "experts" provided were typically head nurses of care facilities for the elderly, executives of gerontological nurse practice groups of Registered Nurses Associations, gerontological Clinical Nurse

Specialists and nurses employed by public health units of the government body.

QUESTIONNAIRES

Two questionnaires were developed after reviewing the literature and scrutinizing nineteen previous surveys on gerontological content in schools of nursing. They were constructed and field-tested for similarities, question format and ease of answering the question. From this the "The Survey of Gerontological Curricula in Canadian Baccalaureate Nursing Programs" (Appendix B) and the "Survey of "Expert" Opinion on Gerontological Curricula Development in Canadian Baccalaureate Schools of Nursing" (Appendix D) were developed. The school questionnaire was pilot-tested by three faculty of local nursing programs (one diploma and two baccalaureate) and the reputational "expert" questionnaire was pilot tested by three nurses in British Columbia: a head nurse in an Extended Care Facility; a head nurse of a Psychogeriatric unit; and an educator in a long-term care facility, a recognized national leader in gerontological nursing.

Each questionnaire was seven pages long with ninety questions closed-ended and eleven open-ended. The questions were similar in each questionnaire to assist with comparisons. Demographic information was collected on all respondents to determine their nursing education, preparation and experience in gerontology.

The questionnaire addressed to the schools of nursing was translated in French before being sent to the three French-speaking generic baccalaureate nursing programs in Canada.

DATA COLLECTION PROCEDURES

A letter of explanation and consent accompanied both questionnaires (Appendix A. and C.). The questionnaires were sent first-class mail along with a self-addressed, stamped envelope. A total of 53 questionnaires were distributed, twenty-two to the directors/deans or designates of each of the Canadian Baccalaureate Schools of nursing programs in Canada (Appendix B). The approximate time to complete each questionnaire was one hour. Seven were received within the allotted time and thirteen within the following month. There was a 90.9 % (N=20) response rate. Thirty-one questionnaires were sent to reputational "experts" in the field (Appendix D). The majority of questionnaires were returned on time. The response rate was 93.55% (N=29). Follow-up phone calls were made to those respondents who had not submitted the questionnaires within the allotted time period (March 20, 1991 - April 22, 1991).

Telephone calls revealed four schools had misplaced the original questionnaire, and they were then supplied with a second. Other schools had passed it on to a designate faculty member and it took time to locate and contact the respondent. Reasons given for slow response time were that the questionnaire was received near the end of the academic year or

that faculty were unusually busy. The questionnaire sent to the schools also required exact data, for example clinical hours, and sometimes necessitated input from several faculty members to complete. A second phone call occurred in eight cases to encourage completion and return of the questionnaire. Fourteen initial phone calls were made to "experts" to encourage completion and six of these respondents required a second phone call to assist with clarification and completion. All questionnaires were destroyed subsequently.

DATA ANALYSIS

Content validity was undertaken to ensure the literature addressed the questions on the questionnaire and that each of the particular gerontological topics were inherent in one of the four nursing concepts identified in the conceptual framework. A matrix was developed to place each question into the conceptual framework presented in this paper.

Frequencies and percentages were calculated on all closed-ended questions. Data were coded and entered into the Statistical Package for the Social Sciences (SPSS) p.c. v. 4.0. Where applicable the results are illustrated using tables and graphs. The open-ended questions were subjected to content analysis with the development of categories of responses. Frequencies were computed on all categories. What is presently being taught in the schools was compared to the opinions of the reputational "experts" and suggestions in related literature, as well as recent research on gerontological nursing curricula.

LIMITATIONS

The results of this study on generic baccalaureate nursing programs in Canada are limited to the generic programs only. The post RN and diploma programs were not addressed. There is too much variety in the length of the post RN program, the type of instruction offered and previous courses accepted to be able to compare and contrast findings. The diploma programs are only two years in length so are unable to offer a wide range of liberal education or the same indepth professional education as the generic programs. These programs will be phased out after the year 2000 as the objective of the Canadian Nurses Association is to have all nurses enter the profession with a baccalaureate degree.

The study was not designed to analyze the process of curricula development nor look for causal relationships or predictors among reported data.

CHAPTER 4

RESULTS

The results of this study are presented in five sections: 1. demographics of the two samples; 2. gerontological curriculum organization; 3. essential gerontological content; 4. gerontology clinical experiences; and 5. commentary from both the schools and "experts" regarding future changes. The study questions are answered under these five sections and reference is made to them as being part of input, process or output for curriculum development.

The first section describes the nursing schools' class sizes, other gerontological programs offered at the same university, nursing faculty's academic preparation, and whether any of these factors influenced faculty to choose to teach in certain schools or influenced students to choose gerontology in their last year practicum. The "experts'" education, primary nursing responsibility, and clinical area of practice are outlined in this section. The faculty preparation and involvement in research are considered as input to the development of gerontological curricula and the number of students choosing gerontological content is considered output in this process.

The second section describes how gerontological curricula were organized in generic nursing programs. The schools' use of nursing models and perspective on health-illness continua are presented and compared with the "experts'" opinions. There were three options for organizing curricula: integrated

throughout the program; partially integrated in nursing courses; placed in a specific required or elective gerontology course. The organizing nursing models and health-illness continua are considered input to the curricula while how the curricula is organized is the process of gerontological curricula development.

The third section describes and illustrates the schools' and "experts'" responses to how and when 49 specific gerontological topics should be taught, as well as how 28 care problems or techniques should be taught. The fourth section describes the type and placement of gerontological clinical experiences. These two sections refer to the process of gerontological curriculum development.

The chapter concludes by discussing the "experts" viewpoints on what they considered to be critical to the graduates' decision to work in gerontology, and suggestions for preparing generic baccalaureate students to work with older persons. The faculty comments on how generic baccalaureate nursing programs have and are changing to accommodate gerontological curricula are also documented. These data and the number of students choosing gerontological experiences in their last year are considered as output of the development of gerontological curricula.

DEMOGRAPHICS

This section assessed responses to Research Questions 5 on whether faculty in generic nursing programs have graduate

degrees with a gerontology focus and 6 what percentage of students chose a gerontological practicum in fourth year.

Schools

Twenty of the 22 schools of nursing (90.9%), representing eight Canadian provinces, replied to the questionnaire. The size of the schools varied. The mean number of students in each year of the baccalaureate program was 66.0 (Table 1). Four schools (three in Quebec and one in Ontario) only have a three-year generic baccalaureate program, admitting students after the first year of a community college or CGEP program.

The total number of nursing faculty who taught in the surveyed schools was 550. Eleven faculty hold a PhD or EdD in gerontology and 16 faculty hold a Masters in gerontology, totalling 27 faculty members with a gerontology focus in their graduate degree. Four hundred and forty-eight faculty had a Master's degree, PhD or EdD in another specialty while the highest academic qualification for 75 faculty was a baccalaureate degree in nursing (Figure 3).

The size of the student body ranged from 113-440. The majority (55.6%) of faculty with a graduate degree in gerontology taught in schools with a student body size between 200-299 (Table 2). The three mid-size schools, with a student body size between 250-299, had the highest number (10) of faculty with a post graduate degree in gerontology. Five faculty with a gerontology-focused degree taught in five schools with a student enrollment between 200-249. Schools

Table 1

Class Size by Year of Generic Baccalaureate Nursing Program.

Year of Program N=Schools	Class Size Range	Mean	SD
1st year (N=20)	33-141	77.8	32.6
2nd year (N=20)	31-142	71.9	27.1
3rd year (N=20)	26-135	64.8	30.3
4th year (N=16)*	30-137	49.6	33.7

*Note:- Four schools offer only a three-year generic program.

Figure 3

Highest Academic Degree Held by Faculty in the Twenty Generic Baccalaureate Nursing Schools (N=550).

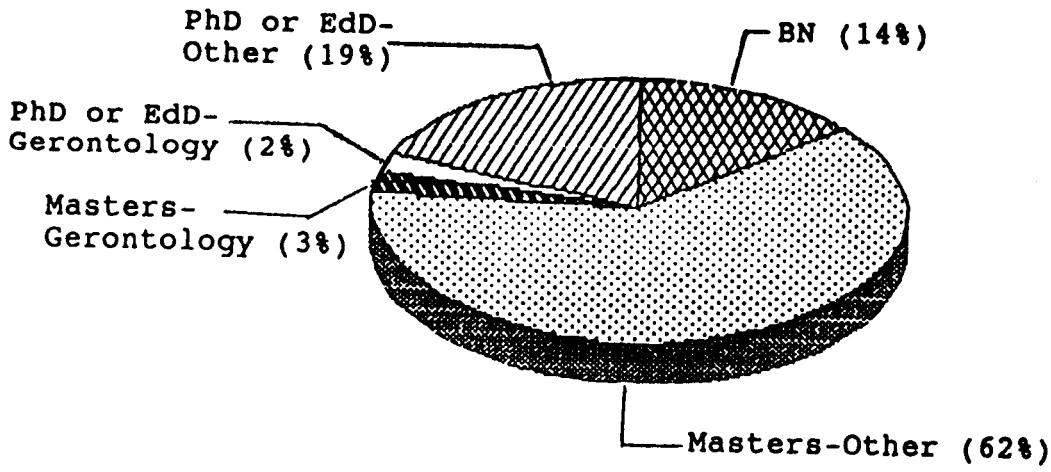


Table 2

Student Population in Relation to Number of Faculty holding Post Graduate Degrees in Gerontology in Generic Baccalaureate Nursing Schools.

Student Population Number	Number of Schools	Number of Faculty	Number of Faculty Holding Gerontology Degrees
400 - 440	2	62	1
350 - 399	3	161	7
300 - 349	2	45	2
250 - 299	3	106	10
200 - 249	5	111	5
150 - 199	3	48	2
113 - 149	2	17	0
Total	20	550	27

with larger student bodies did not tend to have more faculty with a graduate degree in gerontology.

Information was gathered on the type of programs offered in nursing and gerontology at the universities of the surveyed schools (Table 3). Four universities offered a Master's of Science in Nursing with a specialty in gerontology. One university offered a Master's in Gerontology and three of the universities offered a Certificate in Gerontology through the Department of Social Sciences. A profile of the schools (Appendix E) was developed to illustrate the number of students at each school, types of nursing and gerontology programs offered at the surveyed university, total number of faculty teaching in the generic program and the number of faculty with a graduate degree in gerontology.

At the time of the survey there were two Doctoral Nursing programs at schools that also offered a Master of Nursing and a Baccalaureate Degree of Nursing. One of these schools had four gerontology-prepared faculty teaching in the generic program. The one school that offered a Masters of Nursing with a gerontology focus and had a Master's in Gerontology offered by the Social Science Department did not have a faculty member who held a post graduate degree in gerontology. There were three schools who offered a Baccalaureate Degree of Nursing, a Master of Nursing with a gerontology focus option and who had three faculty with a post graduate degree in gerontology. Four nursing schools offered a baccalaureate and a masters degree in nursing and these schools had six (22.2%) faculty academically

TABLE 3

Degrees Offered at Universities with the Generic Baccalaureate Nursing Program in Relation to Number of Nursing Faculty and Faculty holding Graduate Degree in Gerontology.

Degrees Offered at the University in Nursing and Gerontology	Number of Nursing Schools	Total Number of Nursing Faculty	Nursing Faculty with Graduate Degree in Gerontology
BN, MN, PhD in Nursing	2	60	4
BN, MN, MN (gerontology), Master's in Gerontology.	1	32	0
BN, MN, MN (gerontology)	3	126	3
BN, MN	4	124	6
BN, MN, Certificate in Gerontology	1	20	1
BN, Certificate in Gerontology	2	32	1
BN	7	156	12
Total	20	550	27

Note:- BN= Baccalaureate Degree in Nursing. All surveyed schools offered generic and post RN programs.
MN= Master of Science of Nursing or Master of Nursing
MN(gerontology)= Master of Science of Nursing or Master of Nursing with a gerontological focus.
PhD in Nursing= Doctorate of Nursing
Master's in Gerontology= A non-nursing program in gerontology.
Certificate in Gerontology= A non-nursing program in gerontology.

prepared in gerontology. Three schools had Certificates in Gerontology offered at the same university and had two gerontology prepared faculty members. Seven schools only offered a baccalaureate nursing program and had the largest number of (44.4%) gerontology prepared faculty. Generic nursing programs at universities with other gerontology-focused programs had few (18.5%) faculty academically prepared with a graduate degree in gerontology.

Ten nursing schools indicated that 20 (4%) faculty members held an adjunct or joint appointment in a clinical agency with a gerontology focus. The four schools offering a Master of Nursing degree with a gerontology focus had the highest percentage (45%) of faculty with joint appointments.

Eleven schools (55%) were involved in gerontological research or demonstration projects during the two-year period (January 1989 to December 1990) prior to the survey. Seven (63.6%) of the eleven schools conducting projects also offered a Master's degree in Nursing. Four also offered a Master of Nursing with a gerontology focus and one a Certificate in Gerontology. Faculty in five (25%) of the twenty schools were involved in at least three gerontological projects, two (10%) schools were involved in at least two projects, and four schools (20%) indicated they were involved in at least one gerontological project. One school stated it was involved in research/demonstration projects, but did not give titles of the projects (Table 4). Appendix F lists the project titles. Eight were related to health promotion; six to care of the

Table 4

Schools by Faculty with Joint Appointments and by Research/Demonstration Project Involvement.

Generic Nursing and Other Programs at the University	SCHOOLS Number of Schools	Number of Joint Appointments	Number of Demonstration or Research Projects
BN, MN, PhD in Nursing	2	2	1
BN, MN, MN(gerontology), Master's in Gerontology	1	1	1
BN, MN, MN(gerontology)	3	2	1
BN, MN	4	3	3
BN, MN, Certificate in Gerontology	1	0	1
BN, Certificate in Gerontology	2	0	0
BN	7	2	4
	20	10	11

Note:- BN= Baccalaureate Degree in Nursing. All surveyed schools offered generic and post RN programs.
MN= Master of Science of Nursing or Master of Nursing.
MN(gerontology)= Master of Science of Nursing or Master of Nursing with a gerontological focus.
PhD in Nursing= Doctorate of Nursing
Master's in Gerontology= A non-nursing program in gerontology.
Certificate in Gerontology= A non-nursing program in gerontology.
Joint/Adjunct Appointment= A faculty member who also has some responsibility to a clinical facility perhaps as an advisor, researcher or an educator.

elderly in the community; ten to improved care in long-term institutions; one on acute care and three on education.

Twenty-one students (2%) in the fourth year of the program chose a gerontology clinical practicum, even though 14 (70%) of the schools offered an opportunity to choose a gerontology clinical practicum or consolidation experience.

"Experts"

The "experts" (N=29) were individuals from each Canadian province who are, by reputation, leaders in the field of gerontology. Their names were obtained by contacting the president of the provincial Gerontological Nurses Practice Group. The educational level of the nursing "experts" in the field of gerontology ranged from a diploma in nursing to a master's degree with no respondent holding a doctoral degree. The largest group of respondents (24%) held a Master's in Nursing, while 17% held a master's in other than nursing for a total of 41% prepared at the master's level (Table 5).

Most of these respondents' (62%) clinical area of practice was in long-term and extended care facilities. Two worked in other types of institutions, one with the acutely ill elderly, the other in psychogeriatrics. Seventeen percent (17.1%) worked in the community: long-term care (3.4%), home care (10.3%) and preventative health (3.4%). Four respondents (13.8%) indicated other areas: one as administrator of an Adult Day Care Center; one a Director of Care for a home and two with the administrative component of the government (Table 6).

Table 5

Highest Educational Degree: "Experts".

Highest Degree	"Experts" Number	Percent
Diploma in Nursing	5	17.2%
Post RN Certificate	6	20.7
Baccalaureate degree in Nursing	6	20.7
Master of Nursing	7	24.1
Master's degree in other than nursing	5	17.2
Total	29	99.9%

Note: Total percent does not equal one hundred due to rounding to one decimal point.

Table 6

Clinical Area of Practice: "Experts".

Area of Practice	"Experts" Number	Percent
INSTITUTION		
Long-term/extended care	18	62.1%
Acutely ill elderly	1	3.4
Psycho-geriatrics	1	3.4
Rehabilitation care	0	0
COMMUNITY		
Home care	3	10.3
Long-term care	1	3.4
Preventive health	1	3.4
OTHER	4	13.8
Total	29	99.8%

Note: Total percent does not equal one hundred due to rounding to one decimal point.

The "experts" were involved primarily in administration (58%), education (21%) and clinical practice (21%) (Table 7). None reported research as their primary responsibility.

The majority of "experts" (93%) had attended a gerontological education program or conference in the past year as a way of being better informed in the care of the elderly. Seventeen (59%) indicated they were involved in gerontological demonstration or research projects: seven in both a demonstration/pilot project and research project; five in research projects; and five in demonstration projects. Three (10%) "experts" indicated they were participating in at least three projects, seven (24%) in two projects and seven (24%) were involved in at least one project. Appendix G contains a complete listing of projects completed in the last two years by the surveyed "experts".

Summary

The majority of faculty (65%) of the twenty schools offering a generic baccalaureate nursing programs were educated at the master's level and 21% had a doctoral degree, while the highest educational degree for many "experts" (41%) was a master's degree. Twenty-seven (5%) of the faculty of the generic baccalaureate nursing programs had a graduate degree in gerontology. The majority of "experts" worked as administrators (58%) in institutional settings.

Twenty faculty members (4%) had joint or adjunct appointments with gerontological clinical facilities. Eleven

Table 7

Primary Nursing Responsibility: "Experts".

Primary Nursing Responsibility	"Experts" Number	Percent
Administration	17	58.6%
Education	6	20.7
Clinical practice	6	20.7
Research	0	0.0
Total	29	100.0%

schools (55%) indicated involvement in at least one demonstration/research project during the past two years, while seventeen (59%) "experts" stated they were involved in at least one such project to improve care of the elderly in that time period. Most (98%) "experts" had attended at least one educational program in the past year.

The nursing schools located at universities offering other gerontology-specific programs did not have a greater number of nursing faculty with graduate degrees with a gerontology focus; larger schools had fewer nursing faculty with graduate degrees in gerontology. A higher number (74%) of faculty with a graduate degree in gerontology taught in generic nursing programs at schools that also offered a Masters of Nursing Science degree. Research/demonstration projects related to the care of the elderly completed at the schools or by "experts" were similar in number.

Only 21 (2%) students in the last year of the generic nursing program chose to have their clinical practicum in a gerontological setting.

CURRICULUM ORGANIZATION

The second section discusses Research Questions 1 regarding what health-illness continua guide the schools' curricula and the "experts'" philosophy, and 2 what nursing models are used by the schools and the "experts". These two questions relate to curricula input. The process of curricula development, a discussion of the over-all organization of the

curricula answers Research Question 3 regarding whether gerontological content should be taught in an integrated manner throughout the program, partially integrated in nursing courses or in required or elective specific gerontology courses in these programs.

Nursing Models

The curriculum of a nursing school is influenced by the faculty's perception of health and the model or concepts chosen by the faculty to assist with organization of the nursing curriculum content and clinical experiences. Five schools indicated they did not use a nursing model and four schools used their own model (Table 8). The schools were asked how the model was used to develop gerontological education. Comments fell into two major categories: 1) direction for planning patient care and 2) direction for planning curricula. A statement such as "the model is the means by which gerontology care is given" was an indication that the model provided direction for assessment and planning care to the older patient. Comments such as "to structure course content and devise learning aids (eg. assessment tools)" or "used in curriculum planning and development of all courses" were indicators that the nursing model was used to guide curriculum development.

No clear direction was given by the "experts" whether there should be a nursing model or which one (Table 8). Most "experts" (55%) did not favor the use of a model while 28%

Table 8

Comparison of Nursing Models Used by the Schools and Preferences Given by "Experts" for Gerontological Nursing.

Nursing Models*	School Usage Number	School Usage Percent	"Experts" Opinion** Number	"Experts" Opinion** Percent
No model	5	25.0%	16	55.1%
Orem	2	10.0	8	27.6
U of McGIll	1	5.0	1	3.4
U of BC	1	5.0	-	-
U of West Ont	1	5.0	-	-
U. of Moncton	1	5.0	-	-
Lalonde	1	5.0	-	-
Neuman	1	5.0	1	3.4
Parse	-	-	1	3.4
Rogers	-	-	1	3.4
Pluralistic	7	35.0	1	3.4
Total	20	100%	29	99.7%

Note:- * See References for nursing models.
Orem (Orem, 1980)
Lalonde (1974)
Neuman (George,1990)
Parse (1987)
Rogers (George,1990)
McGill U. (Rowat and Gottleib, 1987),
U. of B.C. (Campbell, 1987)
U. of West Ont. (Fraleigh, 1991)
U. of Moncton (University of Moncton, 1988)

** Total percent of "experts" responses does not equal one hundred due to rounding to one decimal point.

preferred Orem's self-care model to direct care of the elderly.

Nine specific nursing models were identified by the respondents. Four were developed by specific nursing schools and five by noted authors and theorists. Orem's self-care model was the most widely used by the "experts", if one was used, while 35% of the schools chose to introduce students to a variety of models.

Health-Illness Continua

The nursing model chosen reflects professional beliefs about the concept of health. Four health-illness continua were included in the questionnaire and the respondents were asked to indicate which one reflected their school's philosophy or reflected their professional opinion. Forty-five percent of the schools favored the continuum of 'adapting to the environment' while 41% of the "experts" embraced the continuum of 'wellness' (Table 9). Others indicated that health and illness should be considered separate entities. Two schools that did not use a model commented: "We believe a person can be ill/diseased but still be healthy." Several "experts" believed that "what works for one does not work for another", and that "health-illness, ability-disability exist in the same individual to varying degrees and in regard to specific systems or aspects of the person."

Two schools chose the health-illness continuum 'fulfills social roles' that reflects principles of community health while nine schools chose 'adapting to the environment', the

Table 9

Preferred Health-Illness Continua of Generic Nursing Programs and "Experts".

Health-illness Continua	Schools Number	Schools Percent	"Experts" Number	"Experts" Percent
Absence of disability/disease - presence of disability/disease	4	20.0	2	6.8%
Fulfills social roles - fails to fulfill social roles	2	10.0	1	3.4
Adapts to environment - unable to adapt to environment	9	45.0	10	34.5
Sense of well-being - languishing disability	2	10.0	12	41.4
None reported	3	15.0	4	13.8
Total	20	100.0%	29	99.9%

Note :- Total percent of "experts" responses does not equal one hundred due to rounding to one decimal point.

premise behind Orem's self-care model often used in gerontological nursing. Only two schools used Orem's model to guide gerontological curriculum development. The choice of nursing models does not correspond with the schools choice of health-illness continua.

Eight (27.6%) "experts" chose Orem's model, which is congruent with 34.5% of the "experts" who chose the health-illness continua the ability to 'adapt to the environment' and function effectively within it. However, the highest percentage of "experts" (41%), chose the eudaimonistic continuum of health: 'sense of well-being' which does not correspond with their preference for a gerontological nursing model.

Organization of Curriculum and Course Options

Respondents were asked if gerontological content was totally integrated throughout the nursing program, partially integrated or taught in a specific gerontological course, either required or elective. A profile of each school according to the type of curriculum and specific course option is found in Appendix H.

Half (50%) of the schools indicated they integrated the gerontological content throughout the program while eight stated they partially integrated gerontology in the nursing courses. Ten schools offered gerontology specific courses: seven as an elective, two as required and one school offered an elective in addition to the required gerontology course (Table 10).

Table 10

Distribution of Schools by Curriculum Type and Gerontological Course Option (N=20).

Curriculum Type	Specific Gerontology Course				Total	
	None	Required	Elective	Both	Number	%
Integrated						
Totally	6	-	4	-	10	50%
Partially	4	-	3	1	8	40
Not Integrated	-	2	-	-	2	10
Total	10	2	7	1	20	100%

Note:- Totally integrated throughout the nursing program
Partially integrated in nursing courses.

The "experts" indicated they would like a required, specific gerontology course (69%) and the gerontology content to be totally integrated throughout the program (66%).

Two comments made by "experts" support the data.

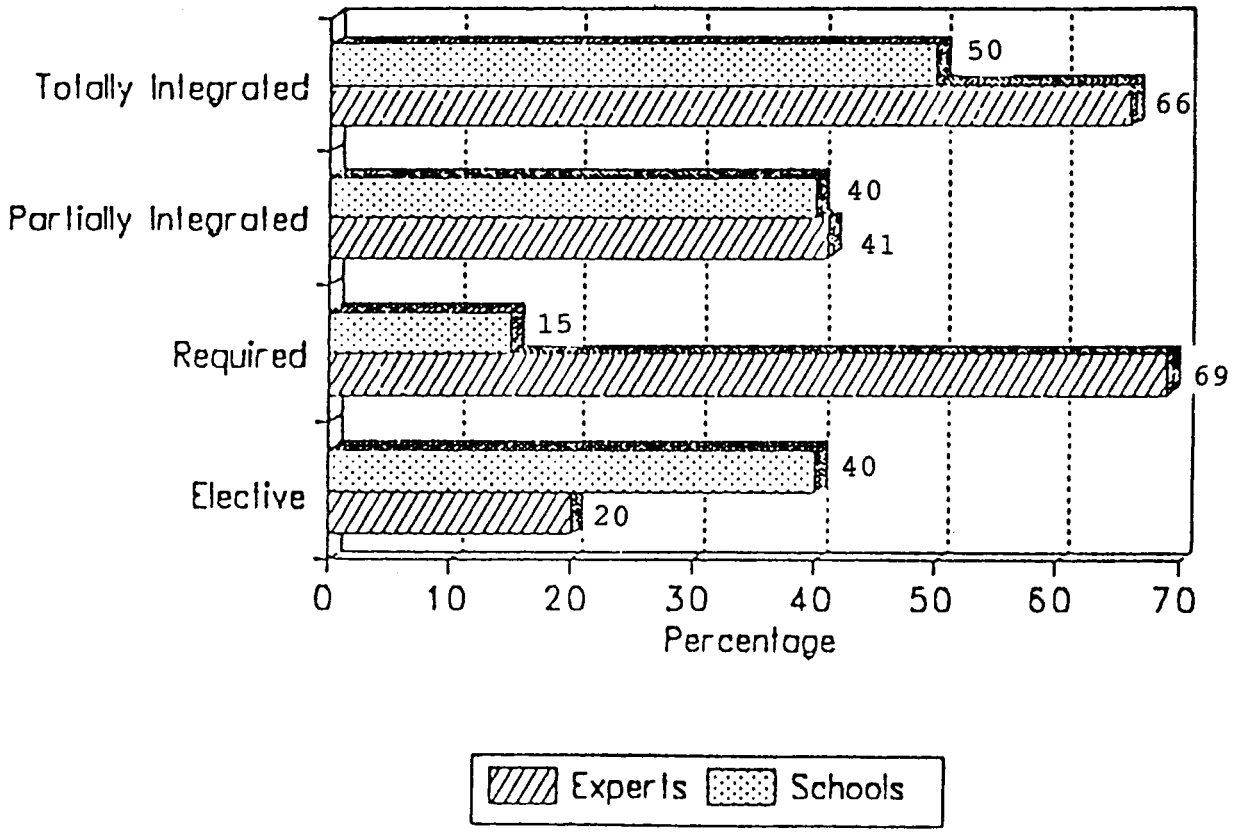
> "I believe there should be a basic compulsory course to delineate the essential components of this specialty area (gerontology) and these components should then be integrated throughout the nursing program" and
>
> "All students require some gerontology and others need electives to provide more depth to this area."

These data indicate that the majority of the gerontological content is integrated, totally or partially, in the generic nursing programs with elective courses being offered in 40% of the schools. The "experts" would like the gerontology content totally integrated and 69% would also have a required gerontology course. Figure 4 demonstrates the data in graphic form.

Comments made by the schools when asked if there was another option included: "Med-surg is adult/elderly focused", "The focus in the first year is the well elderly, electives on gerontology offered at the university", "Integrated in some nursing courses at the discretion/choice of individual faculty members".

Figure 4

Distribution of the Schools and "Experts" by Curriculum Type and Gerontological Course Option.



The responses of schools with gerontology prepared faculty were examined to determine if these individuals were associated with a particular type of nursing curriculum or interest in gerontological research projects (Table 11).

The majority (59%) of gerontology-prepared faculty taught in totally integrated nursing programs; 11% taught in partially integrated nursing courses; while 26% taught in a totally or partially integrated program which also offered an elective in gerontology. One faculty member with a graduate degree in gerontology, but not involved in research, taught at a university that offered a required gerontology course. Of the eight schools that offered an elective gerontology course, one had three faculty with a graduate degree in gerontology, one had two, three had a single faculty member and three had none at all. The school which provided both an elective and required course did not have a faculty member with a graduate degree in gerontology teaching in the generic nursing program.

The majority (57%) of students who chose to work in gerontology (N=21) in their final year practicum were in programs that had a totally integrated gerontology course and offered an elective gerontology nursing course. Fifteen percent of the faculty in these schools had post graduate degrees in gerontology. Seventy percent of the schools offered a practicum in gerontology (Table 12).

Table 11

Curricula and Course Options in Schools with Faculty Holding a Graduate Degree in Gerontology.

Type of Curriculum and Course Option	Nursing* Schools (N=12)		Nursing Faculty Holding Graduate Degrees in Gerontology		Nursing ** Schools Involved in Gerontology Projects	
	Number	Percent	Number	Percent	Number	Percent
Totally Integrated (only)	5	25%	16	59%	4	20%
Totally Integrated and Elective	2	10	4	15	2	10
Partially Integrated (only)	2	10	3	11	2	10
Partially Integrated and Elective	2	10	3	11	2	10
Required Gerontology Course (only)	1	5	1	4	-	-
Elective Course (only)	-	-	-	-	-	-
Total	12	60	27	100%	10	50

Note:- * Eight schools had no faculty holding a graduate degree in gerontology.
** Eleven schools did not report research or demonstration projects in gerontology.

Table 12.

Distribution of Student Graduates (1991) with Gerontological Practicum by Curriculum type.

Curriculum Type	Students who chose gerontology practicum	
	Number	Percent
Totally Integrated and Electives	12	57.1%
Totally Integrated	5	23.8
Partially Integrated and Electives	2	9.5
Partially Integrated	1	4.8
Partially Integrated; Required and Elective Courses	1	4.8
Required Gerontology Courses only	0	0.0
Elective Gerontology Courses only	0	0.0
Total	21	100%

Summary

When the nursing models used by the schools and "experts" were examined, it was found that four schools had developed their own, four schools accepted those of known theorists, seven schools used a pluralistic approach and five schools did not use a model. Fifty-five percent of the "experts" did not recommend a model, while 27.6% suggested Orem's self-care model. Four health-illness continua were presented to the respondents and they were asked to choose one. The largest response for the schools (45%) was 'adapts to the environment' while 41.4% of the "experts" chose the continuum of 'achieving a sense of well-being'.

Half the schools taught the gerontology curriculum in a totally integrated manner throughout the program, and eight schools partially integrated gerontology content. Eight schools also offered an elective gerontology course and three schools had a required course. The "experts" (66%) wanted the curricula to be totally integrated and (69%) to offer required gerontology courses.

Other comparisons revealed that the majority (59%) of faculty with graduate degrees in gerontology taught in totally integrated programs, also that the majority (57.1%) of students choosing gerontology in their last year practicum were graduates of totally integrated programs that also offered an elective course in gerontology.

Twelve schools (60%) indicated they had a special committee or person whose task was to develop gerontological

courses or programs. Twelve schools (60%) had faculty with a graduate degree in gerontology.

GERONTOLOGY CONTENT

A list of 49 topics was compiled by reviewing the literature, previous surveys and from personal experience. This section deals with the process of curricula and answers Research Questions 7 how the gerontology topic was taught (integrated; in specific nursing course; by another discipline; not offered), 8 when it was taught, and 9 what is essential gerontology content. Research Question 10 relates to patient problems and care techniques, commonly found in the elderly, and whether they should be taught in a didactic manner, in the clinical area as the situation arises or through a combination of both. Research Question 11 asks if the patient problems and care techniques should be taught in required or elective nursing courses?

The schools' results are presented first by the type of curriculum: integrated, specific course, other discipline, not taught; second by the year the topic was taught and third by the percentage of schools that taught the topic. The "experts" responses are recorded in the same order.

Responses that varied by 15% or more were compared to illustrate discrepancies in preference for how the topic should be taught. Lastly, the topics were appropriately designated to each of the four concepts of nursing used in this paper as a framework.

Gerontology Content-Schools

The schools taught 34 gerontology topics in an integrated manner. Twenty-one (62%) of the integrated topics had 15% or more spread between integrated and specific curriculum type (Table 13). Eight (38%) of these topics related to socio-cultural issues of aging, six (29%) to nursing knowledge applied to the elderly, four (19%) to assessment skills and three (14%) to principles of care. When the integrated topics were categorized according to nursing concepts twelve related to the concept of nursing, six to environment, three to health and none to the person. Twelve (25%) topics were taught in a specific nursing course and five (63%) of these had 15% or greater spread between curricula types in favor of a specific course (Table 14). These five topics related to changes in the person due to aging and fell into the concept of nursing. Twenty-three topics had less than a 15% spread between curricula types (Table 15). Two topics received equal responses for integrated course and a specific course. The history of gerontology was only taught by 30% of the schools surveyed but had less than a 15% spread between integrated and specific curricula type so is included in Table 15. Thirteen of these topics (56%) fell into the nursing concept, six (26%) were included in the concept of environment, three (13%) to the concept of person, and one to the concept of health.

Other topics, not on the list, but suggested by the schools to be included were, sexuality and the elderly,

Table 13

Gerontological Topics Taught by Generic Nursing Schools with 15% or Greater Spread Between Curriculum Types.

Gerontology Topic: Preference Integrated Nursing Courses	Curriculum Type I	S	Difference
	Percentage of responses		Percent
Principles of rehabilitation	60%	25%	35%
Governments' response to aging	60	30	30
Principles of activation	60	30	30
Principles of palliative care	60	30	30
assessment of environmental and its impact on independence	55	25	30
Discharge planning and older adults	55	25	30
Economics of aging	45	25	30
Research in gerontology	55	30	25
Nursing process and the elderly	60	35	25
Ethnic elderly issues	45	20	25
Holistic health assessment	60	40	20
Common health problems with aging	55	35	20
Gerontology: Interdisciplinary field	45	25	20
Leadership skills required in geriatric settings	45	25	20
Common diseases of the elderly	55	40	15
Advocacy for the elderly	50	35	15
Mental health assessment	55	40	15
Behavior assessment	55	40	15
Assessment of supports	55	40	15
Patterns of coping	55	40	15
Political power of the elderly	45	30	15

Note:- I=Integrated in nursing courses
S=Specific nursing course.
Difference= percent difference between integrated and specific responses

Table 14

Gerontological Topics Taught by Generic Nursing Schools with More Than a 15% Spread Between Curriculum Types.

Gerontology Topic: Preference Specific Nursing Course	Curriculum Type I	S	Difference
	Percentage of responses		Percent
Cognitive functioning	25%	65%	40%
Normal physical changes in aging	40	60	20
Normative losses with aging	40	60	20
Theories of aging	35	55	20
Successful aging and well-being	40	55	15

Note:- I=Integrated in nursing courses
S= Specific nursing course.
Difference= percent difference between integrated and specific responses

Table 15

Gerontological Topics Taught by the Generic Nursing Schools With Less Than 15% Spread Between Integrated and Specific Curriculum Type.

Gerontology Topic: No Preference Indicated	Curriculum Type I	S	O	N
	(Percentage of responses)			
Developmental tasks of later life	45%	45%	10%	-%
Community resources for the elderly	50	50	-	-
Elderly in society	50	45	-	5
Attitudes toward the elderly	50	45	-	5
Pathological cognitive deficiencies	50	45	-	5
Functional assessment	50	45	-	5
Strategies for teaching the older adult	50	45	-	5
Characteristics of older population	45	55	-	-
Family relationships	45	50	5	-
Demographics of aging	45	50	5	-
Communicating with the cognitively impaired elderly	45	40	-	15
Communicating with sensory impaired adults	45	40	-	15
Ethical issues related to aging	45	40	5	10
Diversity in aging population	35	40	25	-
Organization of health care for the frail elderly	40	35	-	25
Legal issues related to aging	40	35	-	25
Gender issues related to aging	40	35	5	20
Health promotion	55	45	-	-
Psychological adaptation to aging	40	50	10	-
Personality development	30	40	25	5
Nutrition and the elderly	50	40	5	5
Pharmacology and the elderly	35	45	10	10
History of Gerontological nursing	10	20	-	70

Note:- I= Integrated in nursing courses
S= Specific nursing course
O= Other discipline course
N= Not offered

housing, retirement, and living wills. Appendix I lists all the topics in the questionnaire and the schools responses while Tables 13, Table 14, and Table 15 list the gerontology topics by the schools responses according to the type of curriculum (integrated, specific, less than 15% between the two types).

Twenty-three (46.9%) topics were taught by over 50% of the schools in an integrated program and nine topics were taught by over 50% of the schools in a specific nursing program. All but one of the topics was taught by 65% or more of the schools (Appendix I).

Many of the topics were taught in the nursing schools in an integrated manner across the second and third years (Figure 5). The low and high year mean are listed in Appendix J. Twenty-three (47%) topics appeared to have been taught in the first and second year of which 19 (83%) related to the concept of nursing, two to health and one each to health and person. Twelve (24.5%) topics appeared to be taught in the third and fourth year; seven (58%) in the concept of nursing and five (42%) in environment. Thirteen (26.5%) topics had a mean year spread greater than 0.8, which the author interpreted as indicating the topics were integrated across all four years. Five (39%) of these topics related to the environment, four to nursing, two (13%) to person and two (13%) to health. Appendix K lists the topics by teaching year.

Table 16 reports the percentage of schools which taught each topic. Eight (16%) of the topics were taught by all of the schools by nursing faculty. Sixteen (33%) of the topics

Figure 5.

Schools' responses to the Year Each Topic is Taught in the Generic Baccalaureate Nursing Programs.

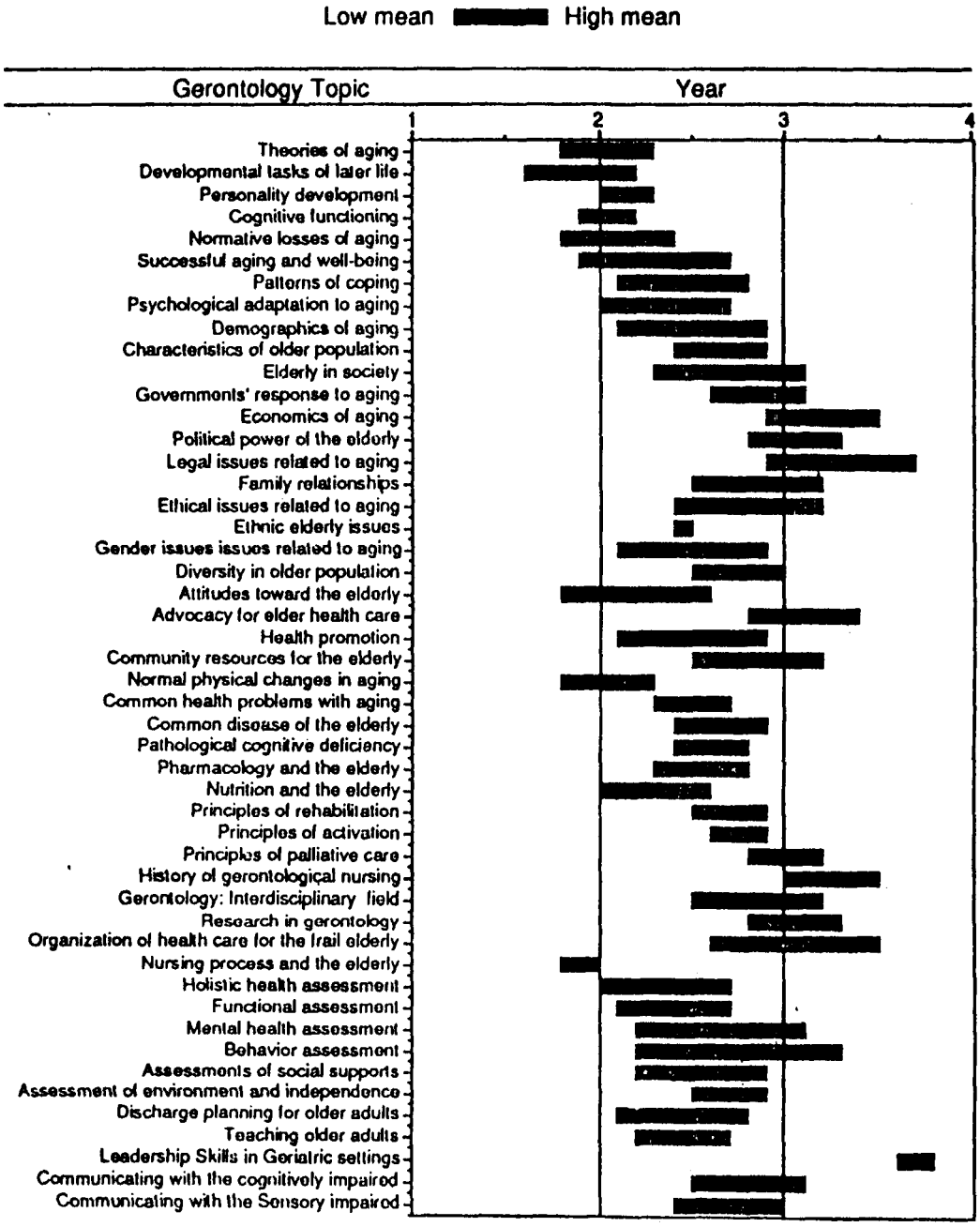


Table 16

Percentage of Schools Teaching Each Gerontology Topic.

Gerontology Topic	Percentage of Schools				
	100%	90-99%	80-89%	70-79%	30-69%
Theories of aging	X	-	-	-	-
Developmental tasks of later life	X	-	-	-	-
Personality development	-	X	-	-	-
Cognitive functioning	X	-	-	-	-
Normative losses of aging	X	-	-	-	-
Successful aging and well being	X	-	-	-	-
Patterns of coping	X	-	-	-	-
Psychological adaptation to aging	X	-	-	-	-
Demographics of aging	X	-	-	-	-
Characteristics of older population	X	-	-	-	-
Elderly in society	-	X	-	-	-
Governments' response to aging	-	X	-	-	-
Economics of aging	-	-	-	X	-
Political power of the elderly	-	-	-	X	-
Legal issues and aging	-	-	-	X	-
Family relationships	X	-	-	-	-
Ethical issues and aging	-	X	-	-	-
Ethnic elderly issues	-	-	-	-	X
Gender issues and aging	-	-	X	-	
Diversity in older population	X	-	-	-	-
Attitudes toward the elderly	-	X	-	-	-
Advocacy for elder health care	-	-	X	-	-
Health promotion	X	-	-	-	-
Community resources for elderly	X	-	-	-	-
Normal physical changes	X	-	-	-	-
Common health problems in aging	-	X	-	-	-
Common diseases of the elderly	-	X	-	-	-
Cognitive deficiencies	-	X	-	-	-
Pharmacology and the elderly	-	X	-	-	-
Nutrition and the elderly	-	X	-	-	-
Principles of rehabilitation	-	-	X	-	-
Principles of activation	-	X	-	-	-
Principles of palliative care	-	X	-	-	-
History of gerontological nursing	-	-	-	-	X

(continued)

Table 16 Continued.

Gerontology Topic	Percentage of Schools				
	100%	90-99%	80-89%	70-79%	30-69%
Interdisciplinary field	-	X	-	-	-
Research in gerontology	-	X	-	-	-
Organization of health care for the frail elderly	-	-	-	X	-
Nursing process and the elderly	-	X	-	-	-
Holistic health assessment	X	-	-	-	-
Functional assessment	-	X	-	-	-
Mental health ent	-	X	-	-	-
Behavior assessment	-	X	-	-	-
Assessment of social supports	-	X	-	-	-
Assessment of environment	-	X	-	-	-
Discharge planning	-	-	X	-	-
Teaching older adults	-	X	-	-	-
Leadership skills for geriatrics	-	-	-	X	-
Communicating with the cognitively impaired	-	-	X	-	-
Communicating with the sensory impaired	-	-	X	-	-

were taught in a small number of schools by other disciplines. Only two of these sixteen topics were reported by 25% of the schools as being taught in another discipline.

Thirty-four (69.4%) of the 49 topics were covered by only some of the schools. Only 15 (31%) of the 49 topics were taught to the students in the generic nursing program by all of the schools surveyed. Yet 30 (61%) of the topics were taught by 95% of the schools. Seven (14%) gerontology topics were not taught by 25% or more of the schools surveyed. The two topics receiving the least number of responses were: the history of gerontological nursing (30%), and ethnic elderly (65%).

Gerontology Content- "Experts"

The "experts" were asked to give their opinion as to how and when the 49 gerontology topics should be taught. The "experts" believed that 21 (42.8%) of the topics with a 15% or greater spread between curriculum types should be taught in an integrated course (Table 17). Eight (38%) of these related to nursing knowledge applied to the elderly; six (29%) to assessment skills; four (19%) related to principles of care; and three (14%) to socio-cultural issues. When the "experts'" integrated topics were categorized according to nursing concepts, eleven (52%) were in the concept of nursing and there were five (24%) each for health and the environment. Sixteen (32.7%) topics were chosen by the "experts" to be included in specific gerontology courses and were related to the uniqueness of elderly persons (Table 18). Ten (63%) specific topics were in the concept of nursing; four (25%) in the concept of environment and two (13%) in the concept of person. There was less than a 15% spread between curricula types for twelve (24.5%) of the topics (Table 19). These included topics to prepare nurses to teach elderly persons and to take leadership roles. Eight (67%) of the topics were in the concept of nursing; three (25%) in environment and one (8%) in the concept of person.

Table 17

Gerontological Topics Chosen by the "Experts", with a 15% or Greater Spread Between Curriculum Types.

Gerontology Topic: Preference Integrated Nursing Course	Curriculum Type I	S	Difference
	Percentage of responses		Percent
Health promotion	83%	10%	73%
Principles of rehabilitation	83	17	66
Principles of activation	79	21	58
Holistic health assessment	76	21	55
Nursing process and the elderly	76	24	52
Family Relationships	69	17	52
Personality development	62	10	52
Patterns of coping	66	17	49
Principles of palliative care	69	31	38
Assessment of environment and its impact on independence	66	28	38
Normative physical changes	66	31	35
Nutritional and the elderly	59	31	28
Ethical issues related to aging	59	31	28
Common health problems with aging	62	38	24
Functional assessment	62	38	24
Attitudes toward the elderly	55	35	20
Assessment of social supports	55	35	20
Gender issues and aging	48	28	20
Behavioral assessment	59	41	18
Mental health assessment	59	41	18
Developmental tasks of later life	52	35	17

Note:- I=Integrated in nursing courses
S= specific nursing courses.
Difference= percent difference between integrated and specific responses.

Table 18

Gerontological Topics Chosen by "Experts", with 15% or Greater Spread Between Curriculum Types.

Gerontology Topic: Preference Specific Nursing Course	Curriculum Type I	S	Difference
	Percentage of responses		Percent
Pathological cognitive deficiencies	28%	69%	41%
Successful aging/well-being	28	69	41
Research in gerontology	21	62	41
History of gerontological nursing	28	66	38
Theories of aging	28	59	31
Characteristics of older population	28	59	31
Psychological adaptation	31	59	28
Pharmacology and the elderly	35	59	24
Organization of health care for the chronically ill	35	59	24
Legal issues related to aging	24	48	24
Governments' response to aging	21	45	24
Economics of aging	21	45	24
Elderly in society	31	52	21
Normative losses of aging	35	55	20
Communicating with the cognitively impaired	41	59	18
Demographics of aging	31	52	17

Note:- I=Integrated in nursing courses
S= specific nursing course.
Difference= percent difference between integrated and specific responses.

Table 19

Gerontological Topics Chosen by "Experts" with Less than a 15% Spread Between Curriculum Types.

Gerontology Topic: No Preference Indicated	Curriculum Type I	S	O	N
	(percentage of responses)			
Advocacy for the elderly	38%	52%	-	14%
Community resources for elderly	38	52	-	14
Gerontology: Interdisciplinary field	35	49	-	14
Communicating with the sensory impaired	55	45	-	-
Ethnic elderly issues	48	35	17	-
Discharge planning for the elderly	52	48	-	-
Common diseases of the elderly	52	45	-	-
Cognitive functioning	41	31	28	-
Leadership skills for geriatrics	45	52	-	-
Teaching older adults	45	48	3	3
Diversity of older population	35	45	17	3
Political power of the elderly	24	35	38	3

Note:- I= integrated in nursing courses
S= specific nursing course.
0= other discipline
N= not offered

There was at least one response for 33 gerontology topics indicating a topic could be taught by another discipline, but the only topic that the largest response indicated this option was for political power of the elderly. Several additional gerontological topics were suggested: communicating with the well elderly, standards of gerontological nursing care in the first year of the program; self-care, sexuality and health and literacy in second year; team approach to care and long-term care management in the third year; social and adaptation skills in presence of diminishing personal supports (family/friends), as well as organizational networking for social change in fourth year. All of the "experts'" responses to how the listed topics should be taught by curricula type are in Appendix K.

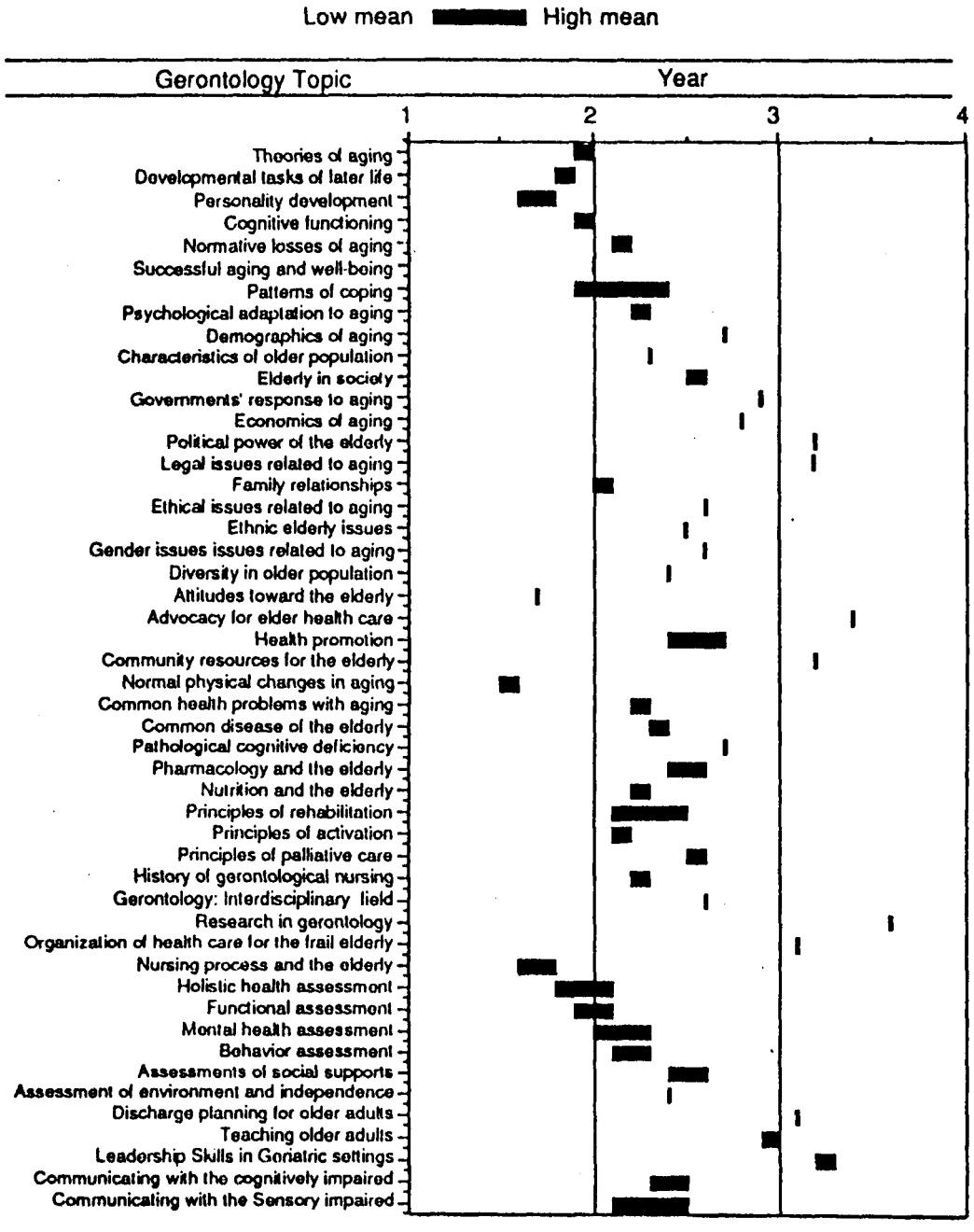
Figure 6 illustrates the year the "experts" chose to have each topic taught. The data is presented in mean years in Appendix M and listed according to the year the "experts" believe the gerontology topic should be taught in Appendix N.

The "experts" chose to have 41 (84%) topics in the first and second years of the nursing program, and eight (16%) topics in the third and fourth year. The "experts" generally only gave one response to the year in which a topic should be taught so there is little or no spread between the low and high year mean.

A vast majority of the "experts" (97%) indicated all of the topics listed should be taught and should be considered essential gerontological content. The one topic that two "experts" indicated did not have to be taught was legal issues

Figure 6

"Experts" Responses to the Year Each Topic Should Be Taught in a Generic Baccalaureate Nursing Program.



of the elderly. Appendix O, lists the percentage of "experts'" responses for each gerontology topic.

The "experts'" responses were more consistent and unanimous than the schools' responses. All of the "experts" chose 71% of the topics to be taught in the nursing program. Over 60% indicated 13 of the integrated topics should be taught. However, they agreed less about the topics to include in a specific course. Some "experts" indicated specific course topics should be taught by another discipline from nursing.

Comparison of Responses

The percentages of the responses were examined to determine differences between the two samples. Ten topics had a greater than 15% discrepancy on how the topic should be taught. Table 20 lists the topics according to differences in suggested curricula type.

Five of the topics taught in an integrated manner by the schools, the "experts" stated should be taught in a specific nursing course. Four of the topics the schools taught in a specific course, the "experts" chose to teach in an integrated curriculum. Health promotion was chosen by both groups to be taught in integrated courses; however, the "experts" generally favored this curriculum type 20% more than the schools. No majority of the schools chose to teach history of gerontological nursing while 66% of the "experts" thought it should be taught in a specific nursing course. The topics taught in an integrated manner by the schools reflected social

Table 20

Comparison of Schools and "Experts" on Gerontological Topics that Differed by More than 15% on Curriculum Type.

Gerontological Topic	Integrated		Specific	
	Schools Percent	"Experts" Percent	Schools Percent	"Experts" Percent
Governments' response to aging	66.6	31.6	33.3	68.4
Economics of aging	64.3	31.6	35.7	68.4
Political power of the elderly	60.0	41.2	40.0	58.8
Pathological cognitive deficiencies	52.6	28.5	47.4	71.4
Gerontological research	64.7	25.0	35.3	75.0
Personality development	42.9	85.7	57.1	14.3
Cognitive functioning	27.8	57.1	72.2	42.9
Family relationships	47.4	80.0	52.6	20.0
Normal physical changes	40.0	67.9	60.0	32.1
History of Gerontological Nursing	10.0	28.0	20.0	66.0
Health promotion	55.0	88.8	45.0	11.1

Note:- Percents for Integrated and Specific only are calculated for comparison reasons.

issues of the elderly and research. The topics taught by the schools in a specific gerontology course were: cognitive functioning (72%); personality development (57.1%); family relationships (80%); and physical changes related to aging (60%). Over 60% of the "experts" expressed the opinion that these last three topics should be taught in integrated courses.

Topics by Nursing Concepts

Table 21 demonstrates the number of topics discussed under each of the four nursing concepts. The topics were placed under the appropriate concept after reviewing the literature and in discussion with a nursing expert (Clarke, Heather.1991).

Thirty (61%) of the topics considered to be essential gerontological content fell into the nursing concept, three (6.1%) into person, twelve (25%) in environment and four (8.2%) in the concept of health. Nineteen (63%) of the topics in the nursing concept were taught by the schools in integrated courses, and ten of these had a 20% or greater difference between integrated and specific. The other eleven topics were taught in specific nursing courses with only four of these topics having a 20% or greater response rate for specific versus integrated. All but one topic in the concept of environment particularly those related to the elderly maintaining power and control were taught in integrated courses. Five of these topics had a greater than 20% difference between curriculum types, with a preference for integrated. Two topics in the concept of person were taught in

Table 21

Classification of Topics by Nursing Concepts and Schools Responses.

Gerontology Topic	Curriculum Type (percentage of responses) Integrated	Specific
PERSON		
Elderly in society	50%	45%
Demographics of aging	45	55
Diversity of older population	35	40
ENVIRONMENT		
Governments response to aging	60	30
Assessment of social supports	55	40
Assessment of environment and its impact on independence	55	25
Community resources for the elderly	50	50
Attitudes toward the elderly	50	45
Family relationships	45	50
Political power of the elderly	45	30
Economics of aging	45	25
Ethnic elderly issues	45	20
Legal issues and aging	40	35
Organization of health care for the chronically ill	40	35
Gender issues and aging	40	35
NURSING		
Nursing process and the elderly	60	35
Principles of activation	60	30
Principles of palliative care	60	30
Principles of rehabilitation	60	25
Health promotion	55	45
Patterns of coping	55	40
Disease conditions	55	40
Common health problems with aging	55	35
Research in gerontology	55	30
Discharge planning and older adults	55	25
Strategies for teaching the older adult	50	45
Pathological cognitive deficiencies	50	45

(continued)

Table 21 continued

Gerontology Topic	Curriculum Type (percentage of responses) Integrated	Specific
NURSING Cont.		
Nutrition and the elderly	50	40
Advocacy for the elderly	50	35
Characteristics of the older population	45	55
Ethical issues related to aging	45	40
Developmental tasks of later life	45	45
Communicating with the cognitively impaired	45	40
Communicating with the sensory impaired	45	40
Gerontology: Interdisciplinary field	45	25
Leadership skills required in geriatric settings	45	25
Normative losses with aging	40	60
Normal physical changes with aging	40	60
Successful aging and well being	40	55
Psychological adaptation to aging	40	50
Theories of aging	35	55
Pharmacology and the older adult	35	45
Personality development	30	40
Cognitive functioning	25	65
History of gerontological nursing	10	20
HEALTH		
Holistic health assessment	60	40
Mental health assessment	55	45
Behavior assessment	55	40
Functional assessment	50	45

specific courses, but there was little difference in the responses for the two curriculum types.

Patient Problems and Care Techniques

Research Questions 10 and 11 asked the faculties and the "experts"' to comment on 28 common patient problems and nursing techniques to assist the elderly client. The schools were to indicate if the problem or technique was taught in the classroom (didactic), the clinical area or both and whether it was taught in a required or an elective course. The "experts" were asked their opinion on how and where the patient problems and techniques should be taught. Table 22 compares the faculty and the "experts'" responses for all items.

The majority of both the schools and "experts" agreed all items should be taught in a required course in both the clinical and classroom areas. The responses from both groups were quite similar except for five items which 28% or more of the "experts" thought should be taught in the clinical area only, and for six items where there was a difference of 17% or more between the schools and "experts'" opinion for teaching the item in an elective course. The "experts" were concerned that certain care aids, such as lifting and transferring techniques (28%), use of mobility aids (38%), hygienic aids eg. century tub (52%), use of communication aids (34%) and feeding assistive techniques (34%), be reinforced in the clinical area. Didactic topics chosen by more than 25% of both the schools and the "experts" were physical and psychological abuse, sleep

Table 22.

Comparison of Responses of Schools and "Experts" on the Teaching of Patient Problems and Care Techniques.

Patient Problem-Care Techniques (descending order)		Placement of Item			Course	
		Both	Did-actic	Clin-ical	Req-uired	Elective
Constipation	S	95%	5%	0	80%	20%
	E	86	10	3	97	3
Skin breakdown	S	95	5	0	85	15
	E	93	0	7	97	3
Incontinence	S	90	5	5	75	25
	E	90	7	3	97	3
Nutritional deficits	S	90	10	0	80	20
	E	69	31	0	90	10
Falls	S	85	15	0	85	15
	E	79	14	7	93	7
Sensory losses	S	85	10	5	85	15
	E	93	7	0	93	7
Decreased mobility	S	85	10	5	85	15
	E	86	10	3	93	7
ADL Deficits	S	80	15	5	85	15
	E	93	0	7	97	3
Loneliness/ Isolation	S	80	20	0	85	15
	E	79	17	3	86	14
Depression	S	80	15	5	75	25
	E	90	7	3	97	3
Chronic pain	S	80	10	5	80	15
	E	90	10	0	97	3
Acute pain	S	80	5	5	80	10
	E	90	10	0	93	7
Lifting and transfer techniques	S	80	5	15	90	10
	E	72	0	28	97	3
Use of mobility aids eg.walker	S	75	0	25	90	10
	E	55	7	38	93	7

(continued)

Table 22 continued.

Patient problem Care technique		Placement of Item Both	Didactic	Clinical		Course Required	Elective
Aggressive behavior	S	75%	15%	10%		80%	20%
	E	86	7	7		93	7
Polypharmacy	S	70	20	0	*	70	20
	E	79	21	0		97	3
Sleep deficit	S	70	30	0		70	30
	E	55	38	7		79	21
Dementia	S	70	20	10		75	25
	E	86	10	3		97	3
Restraints/ Nonrestraint	S	65	20	15		85	15
	E	69	7	24		96	4
Use of hygienic aids eg. century tub	S	65	0	30	*	85	10
	E	38	10	52		86	14
Acute confusion	S	65	20	15		70	30
	E	93	3	3		97	3
Socialization therapies eg. life review	S	65	20	5	*	65	25
	E	66	28	7		72	28
Substance abuse	S	60	30	5	*	70	25
	E	62	38	0		72	28
Use of communication aids	S	60	15	15	*	75	15
	E	59	7	34		86	14
Feeding assistive techniques	S	60	10	25	*	80	15
	E	55	10	34		93	7
Relocation stress	S	55	30	10	*	60	35
	E	66	31	3		72	28
Physical and/or psychological abuse	S	55	30	5	*	75	15
	E	59	38	3		90	10
Financial abuse	S	45	40	5	*	55	35
	E	45	52	3		69	31

Note:- Data listed by rank ordering school responses.
Both= Clinical and Didactic,
S= Schools, E= "Experts"
* Balance of schools responded "Not Offered"

deficits, substance abuse, relocation stress, and financial abuse. The last four items also had over a 21% response rate for elective courses by both groups. Twenty percent of the schools responded that acute confusion could be taught in the classroom while a large majority of the "experts" (93%) felt it should be taught in both classroom and clinical areas.

Nine items were chosen by 25% or more of the faculty to be taught in elective courses. Over 90% of the "experts" stated three of these nine items (depression, dementia and acute confusion) should be taught in a required course. Eleven items were not taught by 5-10% of the schools. Table 22 also illustrates that as the schools preference for both teaching methods decreases so does their preference for a required course. The items related to geriatrics (diseases of the elderly) have the highest response rates and items related to the study of gerontological nursing to assist the elderly to have the highest level of functioning and a sense of well-being have the lowest response rates.

Summary

The gerontology topics provided in the questionnaire have been examined by the schools' and "experts'" responses according to 1) the type of curriculum, 2) the year each topic was taught using mean years and 3) the percentage of responses to each topic. The two sample responses were compared when the differences were greater than 15%. The topics were listed under the four nursing concepts used in the conceptual framework. To complete the section, 28 patient problems and

care techniques were examined to compare the schools' and "experts'" responses on how they were taught and in which type of course, required or elective.

In summary, the faculty taught 34 (69%) of the 49 gerontology topics in an integrated manner, 12 (25%) of the topics in a specific gerontology course; 2 (4%) topics were evenly divided between integrated and specific and one (2%) topic was not offered by the majority (70%) of the schools. The "experts" believed about half (53.%) of the topics should be taught in an integrated manner and 23 (47%) of the topics taught in a gerontology specific nursing course. No topic at all was chosen by the majority of "experts" to be taught by another discipline, but up to 24% of the "experts" noted that some of the topics could be taught by other disciplines. This is a higher percentage for this option than stated by the schools.

The schools noted 23 gerontology topics were taught in the first and second years of the program, 13 topics were taught in the third and fourth year and 13 topics had a year mean spread greater than 0.8 indicating these topics may be integrated across several years. The "experts" indicated 41 topics should be taught in the first and second year and 16 topics in year three and four, earlier in the program than the schools taught the topics. A high percentage (over 90%) of "experts" indicated all of the 49 listed topics should be taught in the nursing programs, while over 90% of the schools indicated

thirty-seven (76%) topics were taught in the generic nursing schools.

A list of ten gerontology topics were identified where the school responses varied from the "experts" by more than 15% indicating a different curriculum type. The topics dealt with social issues, health promotion and changes related to aging. The "experts" stated five of these topics should be taught in a specific course rather than in integrated courses as the schools presently taught them.

The majority of topics (61%) fell into the nursing concept, 25% in environment, 8% in the concept of health and 6% in the concept of person.

Twenty-eight patient problems or care techniques were outlined and the school and "expert" responses were compared. The majority of both the schools and the "experts" agreed all of these items should be taught in both the clinical and classroom settings. Over 20% of the "experts" indicated five specific skills should be taught in the clinical area only. Both the "experts" and schools agreed that all topics should be taught in a required course, although the "experts" had a higher consensus on this issue.

This section on gerontological content discussed research questions related to the process of curricula development. Questions 7 to 11 were answered by presenting the data of the two samples. Gerontological topics were outlined according to curriculum type, when each topic was taught and whether it was considered essential gerontological content. Common patient

problems and care techniques were examined to determine where and when they were taught and the responses of the schools were compared with the "experts" opinion.

CLINICAL EXPERIENCE

The section on clinical experiences consists of three questions. Research Question 12 explored the number of clinical hours spent in gerontology in comparison to four other nursing clinical areas. Question 13 explored the amount of time and the year of the generic nursing program the students spent in eight clinical resources with the elderly. These two questions were the most difficult for the faculty to answer and necessitated follow-up phone calls to clarify the question and receive responses. The integrated programs indicated they had difficulty breaking the information down the way it was requested. The schools with elective courses indicated each student's experience would be different. For these reasons the numbers provided are approximations provided by the faculty respondent. The third question, Research Question 14 asked the "experts" their opinion on the amount of gerontological experience and the purpose of the eight suggested gerontological clinical placements. These questions are concerned with input to the development of gerontological curricula.

Dispersion of Hours in Five Clinical Areas

The first question asked the faculty the minimum number of hours required in each of five clinical areas over the

student's program: medical-surgical nursing, maternal-child nursing, psychiatric-mental health nursing, gerontological nursing and community health nursing. The "experts" suggested percentage of clinical time is compared with the schools' responses (Table 23).

Table 23 illustrates that most of the student experiences were obtained in the medical-surgical institutional settings where the focus is on the acutely ill. Half as much of the clinical experience is in the community visiting a variety of agencies, personal residences and community facilities. These two areas consume 61.9% of the students' nursing experience. The students receive 30.7% of the clinical experience in the two traditional specialties, maternal/child care and mental health. The mean percent of clinical hours in gerontology was 7.4% when using N=20 as six schools did not offer this experience. Fourteen schools did provide a gerontology experience and the range for these schools was 30-280 hours and the mean of the clinical hours was 115.2.

Most of the "experts" chose 20% for each of the five clinical areas with some favoring more medical-surgical experience and others more community experience. Figure 7 compares the schools' and "experts'" responses stating the percentages of the total clinical experience acquired in five nursing clinical areas.

These data show that the schools are still preparing students to work in medical-surgical areas in institutions while the "experts" believe there needs to be a greater

Table 23.

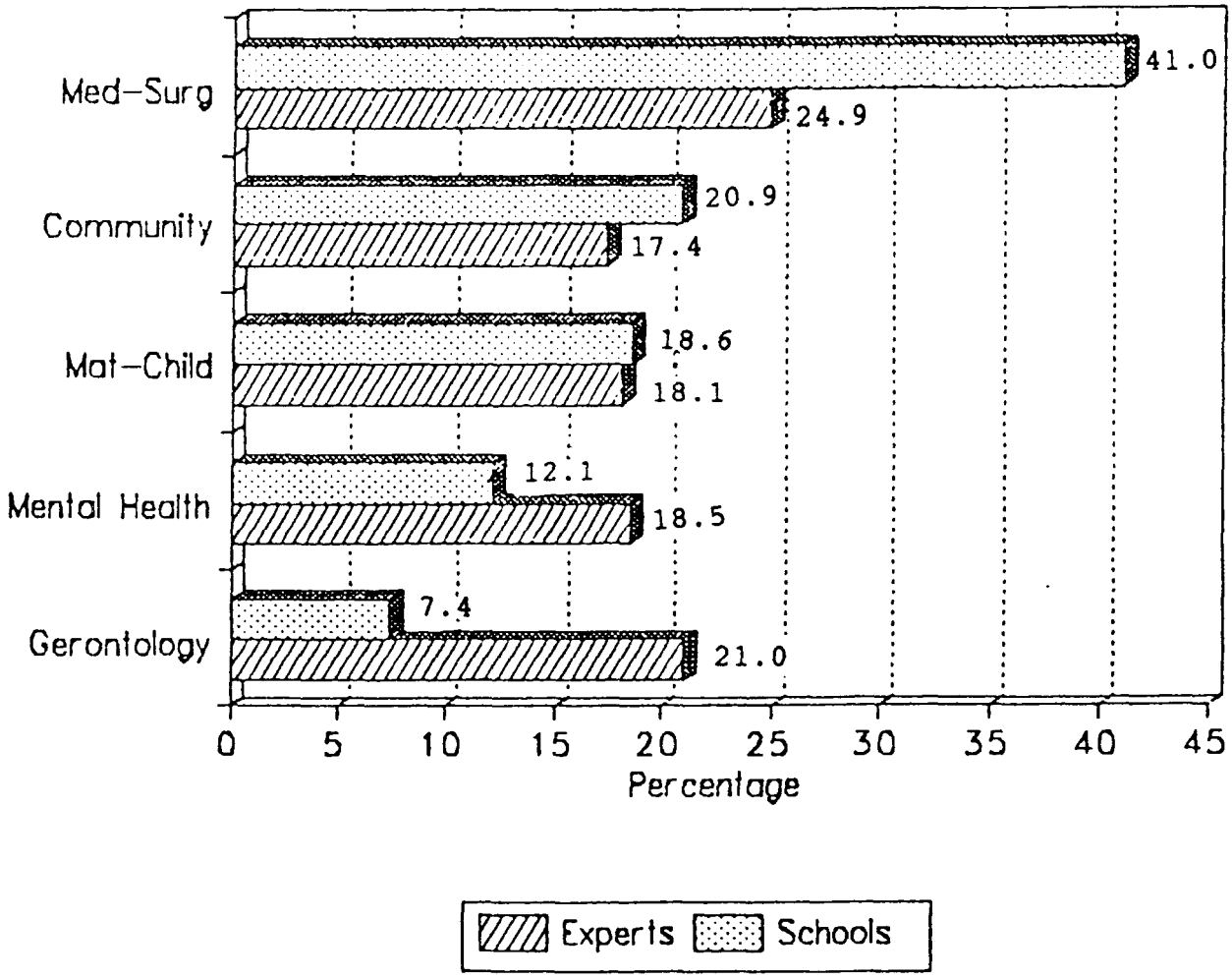
Schools Distribution of Mean Clinical Hours in Five Nursing Clinical Areas and "Experts" Suggested Percentage.

Nursing Clinical Area	SCHOOLS Hours Mean	Range	Percentage of mean	"EXPERTS" suggested percentage in means
Medical-surgical	447.1	198-800	41.0%	24.9%
Community health	228.3	60-520	20.9	17.5
Maternal-child	202.6	60-360	18.6	18.1
Psychiatric-mental health	131.4	60-216	12.1	18.5
Gerontology	80.7*	0-280	7.4	21.0
Total	1090.1		100.0%	100.0%

Note:- * In order to facilitate the comparison (N=20) was used to calculate percentage mean time in this clinical area. However, six of the schools had 0 hours. The mean time for 14 schools was 115.2 mean hours.

Figure 7.

Comparison of Schools and "Experts" Responses on Distribution of Clinical Hours in Five Nursing Clinical Areas.



clinical focus on gerontology in a variety of settings.

Gerontology Clinical Experiences in Eight Settings-Schools

The second question in this section asked the schools to specify the average number of required hours students in the baccalaureate nursing program spent in field placements and the year they had this experience. Eight field placements were listed: private residence of older person, senior center or club, wellness clinic, acute care hospital, rehabilitation hospital, chronic/long term care unit, seniors day care unit, and a psychogeriatric unit (Table 24).

Fourteen of the twenty schools required follow-up phone calls and clarification. It was learned some of the clinical experiences were arranged by the the community health nurse, not the school. Some recorded the acute care hospital hours the same as the medical-surgical experience hours. It was reiterated that each student's experience was varied as smaller groups of students would be sent to these facilities but not every student would go to each field placement. Some schools explained it depended on which facilities were available to them for clinical experience. Considering all these factors, hours were recorded where applicable but represent an approximation of a typical student's experience in these eight field placements.

The clinical placement receiving the highest clinical mean hours (471.6) in gerontology was the acute care hospital. Rehabilitation hospitals (118.8) and chronic/long term care

Table 24

Schools' Distribution of Clinical Hours by Eight Gerontological Experiences and the Year They Occurred

Gerontological Experience	Number of Schools	CLINICAL HOURS Range	Mean	YEAR Range	Mean
Acute care Hospital	20	96-1160	471.6	1-4	2.7
Rehabilitation hospital	12	30- 255	118.8	1-3	1.9
Chronic/long term care unit	14	32- 235	88.4	1-4	1.9
Seniors day care unit	8	2- 208	52.3	1-4	2.9
Psycho-geriatric unit	11	12- 128	51.8	2-4	2.7
Wellness clinic	10	4- 192	43.7	1-4	3.6
Private residence of older person	18	4- 208	39.8	1-4	2.5
Senior centre or club	12	2- 104	28.1	1-4	3.3

units (88.4) received the next highest number of mean clinical hours. The chronic/long term care units were frequently used for student experiences in the first and second year of their program. Most schools did have students visit the homes of older persons, either through an assignment in first or fourth year or by accompanying the community health nurse on her visits. These visits lasted for approximately one hour which accounts for the low mean of clinical hours. The clinical placements frequently found outside the institution received the fewest number of clinical hours: senior day care (52.3), wellness clinic (43.7), private residence (39.8) and senior center or club (28.1).

Purpose of Gerontological Clinical Experiences-"Experts"

The "experts" were asked to comment on the purpose for each of the eight clinical placements. All respondents thoroughly completed this portion. Their responses to the open-ended questions on the purpose of each of the eight field placements were categorized according to the focus of the experience. Client-focused indicates the purpose of the clinical experience was directed toward the student gaining a better perspective of the lifestyle or needs of the older person. Student-focused experiences enabled the student to perform a skill or to participate in an activity. The responses were grouped for better understanding and the number of responses are displayed in parenthesis. A complete list of responses are included in Appendix P.

The purpose of the eight gerontology clinical placements as identified by the "experts" was to assist the student to recognize the elderly's ability to cope with declining functional abilities in a variety of settings. The students were to recognize the strengths of the well and frail elderly and to reinforce the complexity and variety of the role of the gerontological nurse. The "experts" were more unanimous on the client aspects of the experience than the student-focused perspectives.

The main purpose of the acute hospital experience was to allow students to understand the older person's physiological reaction to illness and to provide an opportunity to apply geriatric standards of care in assisting the elderly to cope with illness. The rehabilitation hospital was considered a suitable placement for students for the purpose of acknowledging the potential of the elderly for an improved level of independence while the student learned of certain treatment modalities such as speech and occupational therapies as well as pain control. This would involve teaching and counselling.

The purpose of the chronic/long-term care clinical experience was to understand the effects of institutionalization on the elderly as well as the philosophy of long-term care. The "experts" felt that it was important that the student had good role models to foster a positive attitude while planning and implementing complex care in this setting. A large majority (86%) of the "experts" indicated the

purpose of a visit to the older person's home was "to appreciate the wealth of resources the elders have to help them to grow" and to be aware of how the elderly used community resources to assist them to adapt to aging in the home. The "experts" felt the student-focused activities could include assessment of aids to daily living (ADL's), life review techniques and as one respondent replied, to assess for abuse.

The purpose of the psychogeriatric unit was generally agreed by the "experts" to increase understanding of cognitive dysfunction and how it affects behavior as well as teaching students to differentiate between dementia and mental illness. This experience would provide the student with an opportunity to practise mental status assessments, to plan care of the management of disruptive, aggressive and wandering behavior and to communicate with the cognitively impaired.

The purpose of the wellness clinic experience was to recognize the capabilities of the seniors and the advocacy role of the nurse while having an opportunity to practice a variety of assessment skills and to gain a knowledge of the referral process in the health care system. These comments were similar to those made about the experience in the senior day care units. The senior center or club was seen by the "experts" to provide the student with an understanding of the elderly's psychosocial needs and to observe their social interactions. The student in this setting would gain a better understanding of wellness and gain a positive attitude toward the elderly. All of these settings were considered by the "experts" to be

essential components of the gerontological clinical experience to assist the student to see the elderly in a variety of settings and to appreciate the diversity and strengths of this group of the population.

The "experts" were asked what other clinical experiences would assist the generic baccalaureate student to better understand the elderly person and the roles of the gerontological nurse. Some of these included community projects which assist the social isolates, caregiver groups, palliative care units, discharge planning units and private senior housing projects.

The reason given for these variety of clinical experiences was to become familiar with the variety of services and the role of the team members as well as experience the joys and challenges of working with family units. One statement summed up the "experts" opinions. "The students need to be aware of the complexity of seniors' needs and their desire to maintain their independence". In brief the "experts" wanted the generic baccalaureate students to be aware of the elderly's potential for growth and the community resources available that could assist the elderly to reach their optimal level of wellness. The generic students could learn to assess all aspects of the older client in these clinical experiences and to participate in a variety of health teams.

Summary

This section answered Research Question 12 regarding gerontological clinical hours in comparison to four other nursing clinical hours, Question 13 typical number of hours the generic nursing student spends in eight gerontological clinical areas, and Question 14 the "experts'" opinion of the purpose of these clinical placements.

The schools indicated that the majority of gerontology clinical hours were spent in the medical-surgical setting. Less than a quarter of those hours were spent in rehabilitation hospitals to provide gerontological experiences for the generic nursing students. Fewer hours again were spent in chronic/long term care units and psychogeriatric units. The students spent 163.9 mean hours in clinical settings outside institutions: in private residence of the older person, wellness clinic, senior day care units and senior centers or clubs. Many students received experience in only some of these settings.

The "experts" were asked their opinion of the purpose of providing a clinical experience in each of these eight clinical settings. They responded that the students needed to observe the well and frail elderly in a variety of settings to appreciate the wealth of coping abilities the elderly used and the availability of community resources. The purpose also included student-focused activities such as performing a variety of assessments and working within a health team.

OTHER QUESTIONS ON THE GERONTOLOGY CURRICULA

The "experts" and the faculty of the generic baccalaureate nursing schools commented on needed changes for the future. The faculty's replies answered the Research Question 4.

Other Questions Answered -"Experts"

One open-ended question asked the "experts" if they believed the registered nurses providing geriatric care today are properly prepared to work with older clients. There was a genuine concern that the nurses presently working in gerontological settings were educated in the medical-surgical, disease-oriented nursing model. They felt that some had changed their practice and adapted to the philosophy of gerontological nursing while other nurses had not updated their knowledge level or changed their attitudes toward older people. They indicated educational programs were haphazard and nurses needed more information on aging changes and functional assessment as well as specific gerontological skills. Some voiced concern that the educational programs did not address the ethical, legal or abuse issues of the elderly. One respondent indicated that gerontological nurses required, "energy boosts and support groups." Concern was raised that if gerontology is only taught in elective courses future nurses would not have the necessary knowledge and skills to properly assess and evaluate care given to this population.

Another question asked the "experts" what they considered to be critical to the graduate's decision to work in gerontology. The "experts" felt a positive attitude and a

genuine interest toward the elderly was necessary, as well as a good education to appreciate the challenge of gerontological nursing. Good role models were considered essential to foster a positive attitude and to develop skills such as communication and principles of wholeness and health promotion.

The last question asked the "experts" what suggestions they had for preparing generic baccalaureate students to work with older persons. The largest response was that the generic student must be exposed to the elderly in a variety of clinical settings beginning with the well elderly. Also, the student must appreciate gerontology as a specialty with unique theory and practice skills. All students need a gerontological base which should be reinforced with specific gerontological knowledge and skills. In summary, the "experts" recommended that the generic students begin experiences with the well elderly, advance to caring for the elderly with acute medical problems and lastly be involved in chronic care of the elderly in hospital and support of the frail elderly in the community.

Schools' Curriculum Changes

The schools were asked if they had made any changes in gerontological content or clinical experiences over the previous five years. The majority (85%) indicated they had. The following comments suggest ways the curriculum had changed in these programs. Number of responses are in paranthesis.

> Experiences with the well elderly first with assignments on nursing process and the elderly and the media.(3).

Increased clinical experiences in the home and rehabilitation centres in first year, long term care and mental health in second year and the acutely ill elderly in fourth year.(2).

Introduction of a gerontology elective course in third or fourth year.(3).

Seventy-five percent of the schools planned to make gerontological curriculum changes in the next two years. A summary of their plan include:-

Developing a gerontology elective course (3).

Revising curriculum to include more gerontology (5).

Providing more experiences in nursing homes and extended care units (2)

Revising curriculum to deal with healthy growth and development and health issues first, then building acuity over the program (2).

The schools who responded to this question are making curriculua changes in one of four ways:

1) Focusing on the well elderly first then teaching the complexities of the elderly as the students advance through the program

2) Integrating gerontology into the curriculum

3) Increasing gerontology clinical experience and

4) Developing a specific gerontology course.

Six schools have introduced an elective gerontology course and one school has added a required and an elective gerontology course. All of the elective options open to the students are near the end of their program when they were able to integrate their past knowledge and experiences to benefit the elderly person.

In contrast, the "experts" recommended a required gerontology course be developed for students. One nursing school has done this by providing a required course in second year as well as an elective in fourth year.

Summary

This section answered Research Question 4 regarding curriculum changes to accommodate gerontology content and experiences as well as the "experts'" opinion on three other issues: 1. if nurses in gerontology today are properly prepared to work with the elderly; 2. what factors determine graduates' decisions to work in gerontology; and 3. what suggestions they had to better prepare the generic nursing student to work with older persons.

The answers reflected similar themes. The "experts" believed the present staff in gerontological settings still had a medical-surgical, disease oriented concept of nursing. They expressed concern that education was haphazard and that there was a need for more gerontological skills and assessment techniques. The "experts" indicated that factors which influence graduates' decision to work in gerontology included a genuine interest in older people, a solid gerontology knowledge base and good role models to emphasize the challenge of this field of nursing. The last question was answered by stating the students needed exposure to the elderly in a variety of settings to better prepare them to work with older people.

The schools indicated they planned to change their schools' curricula to include more gerontological experiences with the well elderly, to increase variety of clinical placements and to add a gerontological nursing elective course.

This answered question Research Question 4 and is considered the output of curriculum development.

CONCLUSION

This chapter has described the findings of the study of gerontological curricula in the generic baccalaureate nursing programs in Canada. The first section outlined the demographics of the two samples. There was a 91% return rate of the generic nursing programs and a 93% response of the "experts" representing all 10 Canadian provinces.

There were 27 faculty members in the generic nursing programs who held a post graduate degree in gerontology. Most of these faculty taught in integrated nursing programs who also offered an elective gerontology course. Other factors were investigated to see if they influenced gerontological activities. Niether the size of the nursing school nor other gerontology programs held at the same university influenced the number of faculty in the generic programs with a graduate degree in gerontology or the number of students who chose gerontology for their clinical practicum in their last year of the program.

All of the 49 listed gerontological topics were identified by the majority of "experts" and faculty members as being

essential content. The faculty preferred to teach the topics in an integrated program while the "experts" indicated they would like half of the topics taught in a gerontology specific, required course. The "experts" wished more topics than the schools to be introduced in the first and second year of the program and the others in third year. The schools' data indicated they too would teach most topics in the first two years, but many topics relating to principles of care and assessment were identified as being taught across several years. The 28 patient problems and nursing care techniques were identified by both groups as issues that should be taught in the clinical and classroom setting. More of the faculty of the schools acknowledged that the problems and techniques were taught in an elective course, while the "experts" expressed an opinion that the issues should be taught in required courses.

Gerontology is a relatively new field of study. At the moment it receives only 7.4% of the generic students' clinical time in relation to medical-surgical nursing, maternal-child, mental health and community nursing. Only a few hours were experienced by students in a variety of gerontological clinical settings. The "experts" were asked to comment on why students should receive a clinical placement in these eight settings. Their answers were thorough and indicated the generic student needed exposure to the elderly in a variety of settings in order to appreciate their inherent ability to adapt and grow, and to practise assessment skills and work in a variety of health team roles.

The "experts" were also asked to comment on what would be critical to nurses choosing gerontology. The replies were a good education and positive role models as well as a willingness to work with the elderly. The schools were asked to comment on curriculum changes in the past five years and planned changes for the next two years. The changes included more exposure to the well elderly, more experiences focused on the elderly person and the addition of elective gerontology courses.

The findings of "A Survey of Gerontological Curricula in Canadian Generic Baccalaureate Nursing Programs" illustrated that although gerontology is introduced to the generic nursing student, the knowledge base is weak and clinical hours are too few to ensure each student has the basic skill to properly care for the elderly client in the health care system.

CHAPTER 5

DISCUSSION

This survey of gerontological curricula in Canadian Generic Baccalaureate Nursing programs occurred in the spring of 1991. It developed from the premise that the generic baccalaureate nurses were not being sufficiently prepared to care for those over 65 years of age who comprise 2.7 million of the population. This number is anticipated to increase to one in five of the population by the year 2021. Further, the elderly are presently the highest users of the health care system. The preparation of nurses to care for the elderly who pervade the health care system and how to meet their diversity of needs was the focus of this study.

The question asked was how nursing education was preparing professional generic baccalaureate nurses to meet the health care needs of the Canadian aging society. The survey methodology determined the gerontological content included in the generic baccalaureate nursing programs and the organization of the gerontological curricula.

Of the 22 schools of nursing in Canada that offer a generic baccalaureate degree in nursing, 20 (91%) responded to the questionnaire. The two who did not respond have similar programs to the other generic baccalaureate nursing schools so it can be said the following discussion has a national perspective. From the schools who did respond, an overview of the curriculum organization, preparedness of faculty, and

essential gerontology content and clinical experiences were determined.

Thirty-one reputational "experts" in the field of gerontology, representative of each province, were also surveyed and their responses were recorded to compare their opinion of how and when gerontology should be taught in the schools. Twenty-nine (93%) of the experts responded to the questionnaire.

The results indicate that the generic nursing programs are providing little gerontological specific education to their students; much of the gerontology content is integrated in the nursing programs; few clinical hours are devoted to gerontology; a very small percentage (2%) of students chose a fourth-year practicum in gerontology; and moreover, there is little consistency between nursing schools in how gerontology content is presented to the generic baccalaureate students.

The discussion in this chapter is organized according to the three stages of curriculum development: Input or the requirements of the curricula which includes the guiding philosophy of the health-illness continua, the conceptual framework or nursing model, and academic preparedness of faculty and involvement in gerontological research; Process of teaching gerontology which includes gerontology topics, care problems and clinical experiences; and Output of the gerontology curricula, which includes the number of students choosing a gerontology practicum, and comments from the

reputational "experts" and faculty regarding future changes in the generic nursing curricula.

REQUIREMENTS of GERONTOLOGICAL CURRICULA

A nursing school's curriculum is shaped by the faculty's perception of health, the nursing model or models and the conceptual framework they choose with which to organize the content taught. These factors are influenced by each faculty's academic preparation and philosophy of nursing.

This section addresses responses based on research questions which dealt with these aspects: what health-illness continua influence the schools' curricula and the "experts'" philosophy; what nursing models are used by the schools and the "experts"; whether faculty in generic schools of nursing are academically prepared to teach gerontological content by having a graduate degree with a gerontology focus.

Health-Illness Continua

The acceptance of a health-illness continua is the first step in developing a philosophy of nursing, and also a first decision for schools when developing or revising a curriculum. Faculty members' own education and background will shape their beliefs on the concept of health and influence a faculty's decision as to the goals of their program. This survey compared the responses of the schools on which of the health-illness continua best fit their curricula and the "experts'"

responses on which continua best fit their philosophy of gerontological nursing.

The largest number of the schools (45%) indicated that the continuum 'adapting to the environment' was consistent with their curriculum and conceptual framework. Twenty percent chose the continua 'absence of disease' which considers persons as having integrated parts. Only 10% chose 'a sense of well-being' which is the ideal state for the older client. In comparison, 41% of the "experts" chose the eudaimonistic model of 'a sense of well-being' and 35% chose the continuum 'adapts to the environment.'

Some respondents replied that health could not be placed on a continuum. Their comments reflect the perception that health and illness can occur along separate but coexisting continua, that "health and illness co-exist in varying degrees at the same time"(Kozier and Erb, 1988, p. 78). The theorist R. Parse (1987) presented this dynamic state of health and illness. Parse is an example of the newer theorists that view health as a 'becoming' process. Phillips (in Parse, 1987) noted that Parse's concept of health is similar to Smith's (1983) eudaimonistic model which described health and illness on one continuum indicating health as a state of well-being which is a continuous evolving and changing process in which individuals participate. If Phillips observation is correct, more of the "experts" in the field of gerontology accepted this concept of health than the faculty at the generic baccalaureate nursing schools. The schools' responses indicated many still

related to the traditional, medical models of nursing which would indicate their educational program was organized around diseases or systems.

Nursing Models

After determining one's philosophy of health, it is useful to establish it in a conceptual framework or nursing model(s) that contains the four basic concepts of nursing as outlined by Flaskerud and Hollaran (1980): person, environment, nursing and health.

Seven schools (35%) stated they taught a variety of nursing models to inform the student of the theory behind nursing. Twenty-five percent of the schools stated they did not teach one. This response may imply only that they do not teach a particular model. If these two responses are collapsed into one, 60% of the schools taught more than one nursing model to their students. One school indicated it encouraged the students to choose their own nursing model.

The majority of the "experts" (55%) stated they did not use a particular model themselves or in their work. In the work setting, modifications are made to models to fit the particular situation. Possibly some nurses consider models too theoretical for the work setting. Eight of the "experts" indicated they used Orem's self-care model, as did two of the schools; however, one of the schools stated Orem's self-care model was not helpful in developing gerontological education.

Other models used by the schools were Neuman's systems model (1991), Lalonde's (1974), and four schools of nursing developed their own. McGill's model of nursing and Lalonde's (Gottlieb and Rowat,1987, p.55) are based on the assumption that the health of a nation is its most valuable resource and health involves coping and developing. The University of Western Ontario's model was originally based on Roy's Adaptation model (in Marriner, 1986) but through revisions it is beginning to resemble the McGill model. The University of Moncton's 'cadre conceptual' studies the individual in the context of family and environment in a continuous process to achieve and maintain health. The UBC model for nursing is based on basic human needs and views the client as a behavioral system while nursing's role is to nurture the development of individuals by using coping behaviors to satisfy basic human needs (Campbell, 1987, p.10).

It is a concern that five (25%) of the schools indicated they used neither a nursing model nor the four nursing concepts to organize their curricula or direct the students' nursing practice. Fitzpatrick (1987) stated, "in spite of the recent emphasis on theory-based practice, theory and practice are often divorced in nursing education research and clinical practice"(p.8). This seems to be the case for one quarter of the generic nursing schools and over half of the "experts". Fitzpatrick concludes by saying that "nursing models should be used to develop a practice approach to nursing" (1987, p.9) and it follows that a professions' basic education should prepare

nurses to do this by using one or more models or concepts of nursing in a school's curriculum.

When viewing nursing models as Partial-Focus on Person-Environment Interaction or Total-Focus on Person-Environment Interaction (Flaskerud and Hollaran, 1980), it appears that the Total-Focus perspective is currently held by the majority of the nursing schools. Four of the seven specific models named by the schools fall within the Total-Focus on Person-Environment; the McGill model of nursing, Lalonde's, University of Western Ontario's and the University of Moncton's model of nursing. The other named models, Orem's, Neuman's and UBC's, focus more on the person/client, so fall within the Partial-Focus Person-Environment perspective, which is congruent with the health-illness continua chosen by the majority of the schools.

Only three of the "experts" chose a model which focused on the Patient-Environment equally. The majority chose Orem's self-care model, currently discussed in the literature for care of the elderly and so possibly preferred by the "experts". The majority of "experts", however, chose the health-illness continuum that reflected the Total-Person perspective, a choice not congruent with their concept of health, the eudaimonistic theory.

Current nursing theories and curricula focus more on the person and give little attention to the environment (Flaskerud and Hollaran 1980). The authors indicated that nursing hinges on the interaction of person and environment on equal terms.

The adaptive model does recognize the environment, but the main focus is on the person and how individuals cope and interact with their world. This is the continuum taught by many (45%) of the schools and the one which will influence students' perception of health. Ten percent used the role-performance model and 20% the clinical model as outlined by Smith (1983). In view of the responses received Flaskerud and Hollaran's statement is correct. Schools are not giving equal attention to the interaction of the environment and the person. This indicates the educational programs are not driven by a philosophy/concept of health or conceptual model/theory that is appropriate to the care of the elderly and useful in directing nursing practice.

When the survey's 49 gerontological topics were categorized according to the the four nursing concepts, three topics related to person, twelve to environment, four to health and the remaining thirty to the concept of nursing. This distribution indicated that all concepts were recognized but suggests that attention to the concepts of person and health should be increased to better understand the elderly person and their health status.

Faculty Academic Preparation

One problem identified in the literature review was lack of well prepared teachers (Taft, 1986; Brower, 1985; Williams, 1984) who could act as positive role models for the students and present the gerontology content thoroughly and with

enthusiasm for the subject. Twenty-seven (4.9%) of the 550 faculty at the surveyed schools held a graduate degree with a gerontology focus; 2.2% held a PhD or EdD while 2.9% held a masters degree with a gerontology focus. There are not enough qualified gerontology nursing faculty to act as leaders in the academic field or as positive gerontological role models for the students in the schools of nursing surveyed. Neither the size of the student enrollment nor the availability of related gerontology programs at the same university were associated with the number of faculty holding graduate degrees in gerontology teaching in the generic nursing programs. However, there were more gerontological-prepared faculty at generic nursing schools that also offered a Masters of Science in Nursing, which may or may not have a gerontological focus.

Eleven of the schools (55%) reported having gerontology demonstration or research projects; an indication of improving resources for student and faculty professional development. Ten schools had 20 (4%) faculty with adjunct or joint appointments with a gerontological clinical agency. Faculty should be involved in multidisciplinary teams to assist in planning care for the elderly and faculty should be involved in research as a basis for curriculum content and practice (Miller, 1989). In almost half of the schools, therefore, students were exposed only to 'classroom' gerontology! If the schools are to act as leaders in nursing, it is necessary that faculty remain current and active in research to improve the science and art of nursing and that they share this knowledge

with those in practice settings. Baccalaureate nurses will care for the elderly in a variety of settings so should be taught to assess, plan and implement appropriate care. It is a concern, but not surprising, that so few students chose gerontology for a clinical practicum in their last year. The cause may be a dearth of faculty prepared in this field of interest to act as positive role models for the nursing students.

"Experts"

The reputational "experts" had less formal education than the faculty members. Forty-one percent (41.2%) held a masters degree and 58.6% had a diploma in nursing or a baccalaureate degree in nursing. The majority of "experts" worked in institutional settings; for 58.6% the primary area of responsibility was administration. Most (97%) had attended a continuing education program on gerontology in the past year and 17 (59%) had been involved in gerontological demonstration or research projects in the past two years. This kind of active engagement demonstrates a professional responsibility and interest in increasing their gerontological nursing knowledge base to improve care of the elderly. It also demonstrates that the current nursing role models and preceptors do not feel prepared for their roles. Therefore, it would be prudent to prepare our graduates of the generic baccalaureate nursing programs in gerontological nursing

principles and concepts so they could confidently fulfill these roles in the future.

IMPLEMENTATION OF GERONTOLOGICAL CURRICULA

This section addresses responses to six questions related to the process of the gerontological curricula. There are two components to the process of teaching gerontological content: the classroom setting and the application and practice of knowledge in clinical settings. The discussion first focuses on the gerontological organization and the second on available clinical experiences and the time devoted to gerontology.

Organization of Curricula and Course Options

Following a decision on which concept of health and related nursing model to accept, a school's faculty should decide on what gerontological content to include, how and when to present it and how to organize related clinical experiences for the students. One research question asked if the gerontological content should be integrated throughout the program, partially integrated in nursing courses or taught in required or elective specific gerontology courses.

Half of the generic baccalaureate nursing programs taught the gerontology content in a totally integrated program and half of the schools also offered a specific gerontology course of which 40% were elective. Three more schools planned to add an elective gerontology course in the next two years. Previous surveys on gerontological curricula found that most content was

integrated (Solon, Kilpatrick and Hill, 1988; Hogstel,1988) and this present survey supports this. The literature is indecisive on the advantages of integration. Smith, (1981); Hipps, (1983) and Reed, (1987) believe that integration contributes to increased knowledge and judgement while Hogstel, (1988) indicates a separate gerontology course would help to emphasize the essential components and importance of this specialty. Davis (1980) indicated that integrated content is too easily "lost" particularly if the faculty are biased against gerontology content.

Most reputational "experts" in the field of gerontology (66%) recommended that gerontology content be totally integrated throughout the program while a smaller number indicated it should be partially integrated. Sixty-nine percent of the "experts" favoured a required gerontology course in addition to the material being integrated.

The concern is that half of the Canadian generic nursing programs do not offer a specific gerontology course and of those that do, 40% of the courses are elective. Therefore most generic nursing students will graduate with a small amount of gerontology content presented to them in integrated courses by faculty not educated in this field. The generic nursing programs are providing few gerontology specific courses to consolidate the students' gerontology knowledge.

Placement of Gerontological Content

Another question asked which gerontological topics were taught in an integrated manner, which in a specific nursing course, which by another discipline, and which in the elective course option.

The schools indicated nineteen topics (nearly 40%) were taught in an integrated manner. These topics included principles of rehabilitation, activation, palliation, assessment skills, use of the nursing process, research, advocacy, leadership skills and five topics on social issues surrounding aging. It was dependent on the faculty teaching these concepts whether or not the elderly focus was emphasized. The specific nursing courses included topics such as normal physical changes, losses related to aging, cognitive functioning, and successful aging and well-being. If these topics are only taught in elective courses, only certain students will know how to care for the acutely confused person following surgery or how to assess for abnormal changes of aging. The reputational "experts" recommended 38.8% of the topics be included in required specific nursing courses. The "experts'" responses indicated an emphasis on health promotion and the well elderly in the integrated program, and knowledge related to pathological conditions and the nurse's role with the health team in the specific required nursing courses. This positive approach to the elderly is the one recommended in the literature. Schlepp (1990) recommended the term 'changes' be emphasized instead of 'losses' and the latest report by Johnson

and Connelly (1990) has a topic heading 'health maintenance and promotion.'

Controversy surrounds the decision to integrate a topic or to teach it in a specific course. If the content is integrated, what value is it given by the variety of faculty members teaching the content? Is the content considered essential by each faculty member and by each student? If the faculty are not educated in gerontology themselves or involved in clinical or research projects how will they have the knowledge and positive attitude for teaching this topic? How will the student cope upon graduation when confronted with elderly clients when they do not have the knowledge or skills to assess the nursing situation correctly? In an editorial in the *Journal of Gerontological Nursing* McCracken (1991) indicated such frustrations may force a conscientious person to leave the setting (p.3).

Essential Gerontological Content

This survey sought to determine what essential gerontological content is, both from faculty in generic baccalaureate nursing programs and from reputational "experts" in the field of gerontology. The 49 topics in the survey questionnaire were grouped according to normal changes of aging, the effects of the growing numbers of elderly persons in society, issues related to health care and the elderly, common pathological conditions found in the elderly, special nursing knowledge to assist the elderly using the health care services

and particular skills needed to work with a health care team for the elderly. These topics were similar to those identified by Gunter and Estes (1979), Campbell (1980), McPherson, Liss and McLeod (1983), Garrett (1986), ANA (1986b), Solon, Kilpatrick and Hill (1988), Hogstel (1988) and the recent report by Johnson and Connelly (1990).

According to the nineteen surveys and articles reviewed the most widely taught topics included assessment of changes related to aging (physical, mental, behavioral, functional), theories of aging, growth and development and rehabilitation potentials. Tollett and Adamson's (1982) study revealed faculty preferred gerontology content be focused on normal changes. However, common pathological conditions were identified by Garrett (1986) as being the most prevalent topic. Schlepp, (1990) identified pathological changes as a topic consistently taught in the schools while Tollett and Adamson (1982) found practitioners also preferred a pathological focus. This topic area includes polypharmacy, multiple physical diagnosis and chronic disability. Other topics identified by previous surveys included theories of communication with the elderly (Ellis, 1988), nursing process (ANA, 1986b), managing therapeutic modalities for the elderly (McPherson, Liss and McLeod, 1983), interdisciplinary collaboration, assertiveness, leadership training (Lee & Cody, 1987), and professional development (Johnson & Connelly, 1990).

The list of topics taught by 100% of the surveyed schools in this study was reviewed and it was found that the schools

emphasized the normative changes related to aging, health promotion and the effect of a growing older population on society. The topics covered by less than 70% of the schools included legal and social issues of the elderly, the organization of health care to accommodate their needs, leadership skills and the history of gerontological nursing.

All the surveyed schools (N=20) taught a high proportion of the 49 identified topics. Fifteen topics were taught by all of the surveyed schools of nursing, 30 topics by 95% of the schools and 41 topics were taught by 75% of the schools. This is an improvement since Moses' and Lakes' survey (1968) where they found 12% of the schools taught some gerontology content and Garrett's 1986 survey where 75% of the schools taught some gerontology content. Solon, Kilpatrick and Hill's study (1988) found that most of the 20 topics they presented were required by the schools of nursing. This present survey of gerontology content found that the 49 listed topics were taught by a large majority of the surveyed schools and that all schools addressed gerontological issues. At least 97% of the "experts" indicated all of the listed topics should be taught in generic baccalaureate nursing programs.

Introduction of Gerontological Topics into Curricula

The schools were asked to comment on the year each gerontological topic was taught. Topics taught in the first year related to the nursing process, theories of aging and developmental tasks. Most of the other topics were taught

across the second and third year with only one topic, entitled 'leadership skills required of the gerontological nurse', designated as a fourth-year topic. Topics that were taught later in the program emphasized the need for the student to be more assertive in the role of advocate for the aging and to be aware of global issues surrounding aging.

The "experts" chose seven topics that should be taught in first year. These topics were similar to the schools' first and second year topics except that many "experts" indicated the students needed to know holistic health assessments in first year and health promotion in second year. The "experts" chose 29 topics to be taught between the second and third year and eight topics to be included in the fourth year. Fourth-year topics included understanding the nature of aging in the client and acquiring higher level skills: for example; research in nursing, advocacy, discharge planning, knowledge of community resources, and organization of health care.

The "experts'" responses were more explicit than the schools in defining when certain content should be taught. The "experts" stated that the first year of nursing should explore normal changes of aging, progress in second year to principles of care and assessment skills, in third year to political issues of the elderly and use of community resources, concluding in fourth year with leadership skills required in a geriatric setting. The schools reported that they also taught the normal changes of aging first, then assessment, communication, diseases of the elderly and in third year taught

palliative care, community resources and governments' response to aging.

The two population groups surveyed reported similar sequencing of topics. The "experts" emphasized holistic health and understanding the coping patterns of the elderly earlier in the program, while the schools looked at developmental tasks and physical changes progressing in third year to the students' increasing awareness of influences of the family and community. This reflects the common themes in schools of nursing such as growth and development, physiology and the dynamics of family relationships. However, the schools should emphasize the concept of wellness and health promotion as well as increased directed study given to the specific needs of the elderly.

Patient Problems and Care Techniques

Two questions were asked regarding common patient problems found in the elderly and care techniques necessary to assist the elderly. The first asked if these items were taught in a didactic manner, in the clinical setting only or in both the classroom and clinical areas. The second question asked if the item was included in a required or elective course.

The majority of schools and "experts" agreed that all of the twenty-eight patient problems and care techniques should be taught in both the classroom and clinical setting and that they should be taught in required courses. The items receiving over 85% of the responses from both groups related to common elderly needs: constipation, skin breakdown and incontinence. A higher

percentage of the "experts" than the schools' faculty chose to have the patient problems taught in both the classroom and clinical areas. The items that 25% of both groups indicated could be taught only in the classroom were sleep deficits, relocation and the three items on abuse. General consensus amongst the "experts" indicated lifting and transferring techniques, use of mobility aids, nonrestraints and use of hygienic aids should be taught in the clinical area only. This would indicate that these skills require practice with a client in the clinical setting. Chronic and acute pain and socialization therapies were not taught by 5% to 10% of the schools. Perhaps this question was misunderstood as it is difficult to believe that the concept of pain would not be taught in the nursing program.

Topics that over 20% of the faculty taught in elective courses included: constipation, incontinence, nutritional deficits, depression, aggressive behavior, sleep deficit, dementia, acute confusion and socialization therapies. These are common health problems of the elderly in the community and in acute and long term care institutions. It is necessary that all nurses be able to manage these problems with all elderly persons and they should be required content in generic nursing programs.

Clinical Experiences

This section addresses the two research questions related to clinical experiences available to the generic nursing

students: first, the number of clinical hours spent in gerontology in comparison to four other traditional nursing clinical areas; and second, the number of clinical hours spent in each of eight listed gerontology settings and in what year of the program the experience was offered. It also considered responses from "experts" as to their opinions on the purpose of each of these experiences.

According to Rich, Connelly and Douglass (1990) students should complete most or all of the core course content before beginning a practicum and there should be planned experiences with older persons during all the core courses. This present survey of gerontological nursing in baccalaureate programs in Canada found that only 7.4% of the students' clinical experiences had a gerontological focus. This indicates that the generic nursing students are not getting sufficient exposure to older persons and that the experiences are not always well planned to provide meaningful outcomes. Since it is predicted that by the year 2000, 20% or more of the population will be over 65 and that this group will have more disabilities than any other age group and thus be the most frequent users of health services, it is imperative that nurses be prepared to assist the elderly to attain and maintain a quality of life and a sense of well being. In order to do this the student should gain familiarity with the elderly in a variety of settings both to appreciate elderly's values and goals for life and to have an opportunity to practice assessment skills and the application of the nursing process.

The surveyed "experts" indicated that 21% of the clinical hours should be spent in gerontology. As indicated, the schools are not meeting this suggested criteria.

Another critical issue is the type of gerontological experiences offered the generic student. Eight clinical settings were listed and the schools were asked to state the typical number of hours a student would receive in this setting over the generic nursing program and the year they would receive this experience. The largest mean number of clinical hours occurred in acute care hospitals (471.6 hrs.). In discussion, faculty members stated that the student was exposed to the elderly in hospital so often the medical-surgical and gerontological hours were the same. However, few stated whether the acute care experience was provided with a gerontological focus. This is similar to the findings of Johnson and Connelly who stated that "actual care of older persons may not be based on current knowledge of the general principles of aging...so special aspects of care may not be operationalized by faculty for student incorporation into patient care" (1990, p. 5).

Other clinical placements received far fewer mean hours: rehabilitation hospital (118.8), chronic/long term care unit (88.4) and psychogeriatric units (51.8). The four settings with a wellness focus located outside of institutions received only 163.9 mean clinical hours. Students are still receiving their majority of clinical experiences in the medical, disease-oriented institutions.

The rehabilitation hospital and seniors day care unit experiences occurred in first year, five other experiences occurred in second year, with the acute care hospital experiences provided in third or fourth year. This does indicate that the well elderly experiences occur in second year with care of the frail elderly in first year and the ill elderly in third year. No specific gerontology experiences were offered in fourth year to allow the students to integrate their knowledge of nursing and gerontology.

The "experts" were asked their opinion on the purpose of each of the eight clinical experiences. They provided a variety of client-focused goals such as gaining an understanding of the strengths of the well and frail elderly and an understanding of the complex and challenging role of the gerontological nurse. It was their desire that the generic nursing student understand the elderly's motives and skills to adapt before applying nursing measures to this age group.

In order to prepare nurses for the future, meaningful experiences with the well, frail and ailing older person could be provided. Both the literature and the "experts" surveyed recommend that students experience the well elderly before being exposed to the acutely ill elderly and then the elderly with multiple and complex nursing care needs. The latter should be provided in the last year of the program to allow the student to integrate previous knowledge and consolidate it in a meaningful way with the elderly. The schools are not providing

a variety of clinical experiences in this sequence at this time.

RESULTS of GERONTOLOGICAL CURRICULA

The last step in the process of curriculum development is the output and it is measured by the number of students who were influenced to choose a gerontology practicum in the last year of their program; recommendations made by the reputational "experts" on preparing graduate nurses; and anticipated curricula changes by the schools.

Students Choosing Gerontology Practica

A study of the demographics of the schools revealed that there are a total of 5,300 students in the generic baccalaureate nursing programs with a mean class size of 66 as of the spring of 1991. There were 992 students in the fourth year of the generic nursing programs of the surveyed schools (N=20) and of the fourteen (70%) schools who offered a fourth year clinical practicum, twenty-one (2%) students chose a gerontological practicum. This indicates a low student interest in this field of nursing.

An educational program is evaluated by measuring the outcomes of its programs such as the success with which the students met the competencies of the program and through ongoing and summative evaluation. While this study did not evaluate the students' knowledge and skills in gerontological nursing, it looked at the number of students who chose a

gerontological practicum in their last year as an indicator of a positive attitude toward this field of nursing. It follows that such a student would view gerontology as challenging and rewarding and therefore might seek employment in this area upon graduation.

Recommended Curricula Changes

The "experts" were asked for suggestions on how to prepare generic students to work with older people. Their answers indicated a need for more exposure to older persons beginning with the well elderly and the acutely ill and progressing to the frail elderly with complex nursing needs. Many of the schools stated they were planning to change their curricula in the next two years by including more gerontology content, more clinical experiences with the institutionalized elderly and in the case of three schools, a gerontology elective course. Although these changes are welcomed it would be more favorable to develop a required gerontology course and increase the exposure to the well elderly in the community.

IMPLICATIONS

This study posed fourteen questions with regard to gerontological curricula in generic baccalaureate nursing programs in Canada. The results indicated that there was little gerontological core knowledge taught in a consistent manner in the baccalaureate nursing programs and that there were few clinical hours provided with a gerontological focus.

The schools indicated that they are in the midst of making changes to accommodate more gerontological content and experiences.

According to the survey there are too few nursing faculty educated at the graduate level in gerontology to provide the level of instruction that is required. Unless the number of faculty interested, educated and involved in research in gerontology increases, attention will not be given to this field of study by schools of nursing or by students. There are too few faculty members to act as positive role models for the students, to influence curricular decisions and to conduct the research and demonstration projects essential to the school's curriculum.

The present generic nursing programs integrate gerontological content in the curriculum. However, there is concern that the content may be lost in the curriculum. In addition, the word "integrate" implies that content development should progress from a general state to one of differentiation with appropriate nursing and gerontological principles being applied throughout the process. The present generic nursing programs appear to be integrating gerontological content in a general way but have not progressed so that knowledge and skills are differentiated to meet specific patient problems. This situation could be altered if a specific required gerontology course was offered later in the program. However, it was found that the specific gerontological knowledge was taught in elective courses. Therefore, many generic

baccalaureate nurses do not acquire specific gerontological knowledge or clinical skills. Hogstel (1988) recommended a separate required course in gerontological nursing should be offered to emphasize the essential components of this specialty. It would be helpful to offer this course later in the program to assist students to integrate and apply knowledge and skills important to gerontological nursing. Presently, there are only three required gerontological nursing courses offered in the surveyed generic nursing programs in Canada. The schools might wish to review the output of their program and the effect on the students of their integrated gerontology topics.

The majority of the listed gerontological topics and patient problems and care techniques were taught by the schools in some way. The schools were aware of and were attempting to address the need for gerontological nursing. However, given the needs of the elderly, specific patient problems such as abuse, confusion, dementia and depression are critical to a comprehensive undergraduate nursing education. To reinforce this knowledge the clinical experiences could focus on patient problems to assist with assessment and application of interventions and encourage development of skills such as communication, mobility and hygienic aids. These skills are difficult to master in the classroom.

The gerontological clinical hours account for only 7.4% of the generic students total clinical hours. The schools could use more community facilities and resources and place students

in some of these settings for a gerontological clinical practicum in the last year of their program. Future trends indicate that care of the elderly will occur in outpatient facilities and in the home. Therefore nurses must feel comfortable and confident to work in these settings.

The majority of schools did not use nursing concepts or nursing models that were congruent with their concept of health and illness or with gerontological nursing. Consistency between a philosophy and a nursing model would assist in development of a curriculum framework for gerontological nursing.

This study contains useful information for faculty of generic baccalaureate nursing. The data collected may guide faculty in their curricula decision-making and act as a measure for curriculum validity by examining the balance and emphasis among content areas and assist with decisions on whether to integrate or block content. A variety of clinical experiences are identified and discussion regarding their placement and relevance may influence experiences offered students in generic baccalaureate nursing programs in the future.

The identification of the model or conceptual framework used by the school as well as the academic preparation of the faculty is used as a basis for discussing the factors that influence change in nursing curricula. The basic education of a professional group influences the practice of that profession. This research, then, may assist in the improved

education of nurses and the development of gerontological nursing in Canada.

RECOMMENDATIONS

In order to better prepare generic baccalaureate nursing students to meet the health care needs of the elderly the following recommendations are proposed:

1. That the gerontological content in the classroom be increased by integrating it more consistently throughout the program and by providing a required gerontological focused course later in the program.

The content to be integrated throughout the nursing program should include knowledge of the elderly's developmental tasks and normal physical and cognitive changes related to aging. This content should receive at least equal attention to other age groups such as the infant and adolescent. An overview of the elderly in society and the effect they have on the political and economic institutions of the country and on the health care system could be taught in an integrated manner. This would provide the student with a core of gerontological knowledge early in the program and contribute to increased understanding of the elderly client in a variety of future clinical experiences.

The required gerontology-focused course should be provided in the third or fourth year of the generic nursing program. This course should include classroom and clinical components and be taught by persons with a graduate degree in gerontology or someone who has maintained knowledge and clinical competence

in gerontology. The required gerontology course should address specific problems of the elderly and care techniques such as common physical and mental health problems as well as problems related to lack of social or family support: isolation, depression and abuse.

2. That the percentage of gerontological clinical hours be increased so that experiences can be gained in a variety of community and clinical facilities.

It is recommended that students receive experience with the well elderly, for example, in senior housing complexes, senior centres or clubs, private homes or wellness clinics. The purpose would be to provide increased understanding of the personal and community resources of the elderly with an emphasis on the promotion of health rather than on the pathology of the aging process.

Secondly, it is recommended the student receive experiences with the frail elderly in adult day care centres, stroke clubs, short term assessment units, short stay units, outpatient departments, and rehabilitation centres and attend client and caregiver support groups in order to gain knowledge of the range of community support services. During these experiences students could develop their functional assessment skills, develop discharge plans and participate in the health team.

The third type of clinical experiences should be with the ill elderly in crisis and should deal with complex health issues. These could occur in acute care units where the focus is on the care of the acutely ill elderly person and in other

specialty units with a high elderly population such as orthopedics and urology, psychogeriatric units and chronic or long-term care units. These experiences would provide the student an opportunity to fully integrate their gerontological knowledge and skills while learning leadership skills necessary to work with a team in these organizations.

3. That faculty in generic baccalaureate nursing programs examine their gerontological curricula to ensure a fit between their concept of health and their nursing model.

A school's curriculum and nursing practice should be based on a goal and on an organizing framework. The goal will depend on the school's philosophy of health and nursing model. The philosophy recommended for gerontological nursing and supported by the literature and the respondents is the eudaimonistic concept of health which views health as an ongoing process to attain a state of well-being. The four nursing concepts of person, environment, nursing and health should be used to organize gerontological content and experiences. The emphasis given to each of these concepts varies in each nursing model. The findings of this study suggest that models which consider the person and the environment equally should be given greater emphasis in an expanded and integrated gerontology nursing curricula. Assistance may be sought from gerontological clinical nurse specialists or by an advisory committee of recognized leaders in gerontology to revise or develop a gerontological curriculum.

4. That schools of nursing require faculty members with clinical experience and a graduate degree in gerontology to be responsible for developing and implementing the gerontological curriculum.

This study identified that there were too few faculty (5%) with a post graduate degree in gerontology teaching in the generic baccalaureate nursing schools. The reputational "experts" suggested that more (21%) clinical hours be devoted to gerontology in a variety of settings. To develop the gerontological curricula it is necessary to increase the number of faculty with gerontological preparation employed in the schools of nursing and to teach the students gerontological nursing principles. These faculty members should be encouraged to remain active in the clinical environment and to share their expertise with health teams in clinical agencies. Faculty members also have a responsibility to further nursing's knowledge base by being involved in gerontological nursing research.

The nursing schools should be more accountable to the health care needs of the elderly who will soon comprise 20% of society and are the highest users of the health care services. The nursing faculty have a professional responsibility to prepare their graduates to respond to the health care needs of society. Some of the faculty should have gerontological knowledge and experience to educate students in gerontological nursing. It is clear that without an increase in faculty with a post graduate degree in gerontology the number of graduates choosing to work in gerontological settings will remain low. A

ratio of one gerontology prepared faculty member to fifty students would assist in this endeavor.

5. That more masters and doctoral nursing programs with a gerontological focus be available.

These programs are essential to prepare faculty as proposed in Recommendation 4 who have expertise in gerontological nursing and who are trained as researchers of gerontological nursing. Should certification be required for Clinical Nurse Specialists in the future, minimally a master's preparation is the basic requirement proposed by CNA (1988) and should be the qualifications of faculty of generic baccalaureate nursing programs. Doctoral qualifications will materially enhance research training in nursing programs. Post masters and doctoral programs in gerontology should be made available to existing generic baccalaureate nursing faculty to strengthen the leadership in schools of nursing.

6. That more gerontological continuing education be provided for nursing faculty and clinicians.

Schools of nursing, health care agencies, professional nurses associations and professional nursing practice groups should collaborate in the development of short term continuing education programs to facilitate the dissemination of gerontological knowledge and to improve gerontological curriculum development in the schools. Continuing educational programs designed to teach about the unique needs of the older person and common elderly clients' problems will enable faculty to increase their interest in gerontological nursing and to

develop as positive role models and preceptors for generic nursing students in a variety of settings.

Continuing education programs could be organized by the schools themselves or in conjunction with the provincial nursing associations which would assist with providing recognized resource persons to develop and implement a meaningful educational program.

7. That funding be increased for gerontological nursing research and education.

Sources of funds for this recommendation should be increased from the provincial ministries of health, interested advocacy groups (eg. Friends of the Elderly, Old Age Pensioners Associations), professional and national practice groups (eg. Canadian Gerontological Nursing Association), support groups as well as nursing associations (eg. RNABC). Bursaries, scholarships, fellowships and research grants would assist nurses in continuing their professional development in gerontology, would encourage and assist nurses to upgrade their formal education in this field, and would assist nurses in conducting curriculum and research projects to improve care of the elderly. All of these would strengthen generic baccalaureate nursing programs.

8. That a research project be designed to validate the findings of this study and to gain a national perspective on the requirements of gerontological nursing at the baccalaureate level.

This study explored the opinions of representatives from the baccalaureate nursing programs and reputational "experts" in the field of gerontological nursing. It would be useful to

validate and gain a national perspective on the requirements of gerontological nursing at the baccalaureate level by eliciting opinions of those with post graduate degrees in gerontology who work in the field and in academia. A curriculum analysis could be developed by reviewing course syllabi to verify the presence of gerontological content and the percentage of time allocated to gerontology topics particularly in an integrated curriculum. Research is also needed to document the number of students choosing to work in gerontology and to follow the students who have graduated to determine where they are working, the percentage of their clientele who are over the age of 65 and whether the students feel prepared to work with this age group. This study would provide excellent outcome measures for curriculum evaluation.

From these studies a series of professional symposia and conferences sponsored by schools of nursing and nursing associations could be developed to present the findings, resolve discrepancies and to bring expert clinicians, researchers and nursing educators together. This process will be essential as curriculum development in gerontological nursing is undertaken in schools of nursing in Canada. Faculty and staff involvement in these recommended research projects could also contribute to their professional development.

9. That a replication of this research on gerontological education in the generic baccalaureate nursing programs be done.

It would be beneficial to repeat this "Survey of Gerontological Curricula in Canadian Generic Baccalaureate

Nursing Programs" in five years to document the changes and advances that schools have made in curricula. Two questions should be added regarding the percentage of time in integrated courses that is given over to gerontology content and the minimum number of hours devoted to gerontology.

CONCLUSION

This study has reviewed what is presently being taught in the Canadian generic baccalaureate nursing schools. It has found that the majority of generic baccalaureate nursing graduates will not be well prepared to care for the elderly client. Recommendations have been made which these schools should consider in order to strengthen the gerontological content and clinical experiences of their curriculum. Many schools indicated gerontological changes are being planned. It is hoped this study has provided some insight into the complex curriculum issues that must be considered.

The nursing profession should be prepared to respond to the needs of all ages equally. As health statistics show, the elderly increasingly use the full range of care facilities from the wellness clinic in the community centre to the acute care unit in the hospital. It is time nursing educators expand gerontological nursing in the generic baccalaureate nursing curricula to adequately prepare graduates to meet the demands of the elderly on the health care system. It is incumbent on the nursing schools to prepare and employ faculty who are adequately prepared for the challenge.

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THE UNIVERSITY OF BRITISH COLUMBIA

Appendix A.

Adult Education
Department of Administrative,
Adult and Higher Education
5760 Toronto Road
Vancouver, B.C. Canada V6T 1L2
Tel: (604) 822-5881
Fax: (604) 822-6679

March 20, 1991.

Dear

I am a Master of Arts student in Adult Education at the University of British Columbia. I am requesting your assistance as I believe that your contribution will be invaluable to my study and will benefit the development of gerontological nursing programs in Canada. The focus of my research thesis is "Gerontological Curriculum in Canadian Generic Baccalaureate Nursing Programs".

The enclosed questionnaire asks questions about content and clinical experiences in the generic nursing curriculum at your university. Questions are also asked about the teaching staff of the nursing program.

The questionnaire should take approximately one hour to complete. If you wish to delegate the completion of the questionnaire to an appropriate faculty member, that is acceptable. Completing the questionnaire is accepted as consent to participate in the study.

Please complete and return the questionnaire within the next two weeks. If I do not receive your completed questionnaire by April 15th I will contact you to assist with completion of the questionnaire. Your responses will be kept confidential. All questionnaires will be destroyed when the research project is completed.

I would like to thank you now for your cooperation and support. If you have any difficulties please do not hesitate to call me or my advisor.

Sincerely,

Anne Earthy RN. BN.
(604) 266 - 8408 (Home)
(604) 875 - 4433 (Work)

James Thornton. Ph.D.
(604) 228 - 5881

Appendix B.

SURVEY OF GERONTOLOGICAL CURRICULA IN CANADIAN GENERIC BACCALAUREATE NURSING PROGRAMS

GENERIC BACCALAUREATE NURSING PROGRAM

This survey has been designed to identify how baccalaureate schools of nursing are preparing generic baccalaureate students to work with the increasing older population in Canada. Please answer the following questions about your Generic Baccalaureate Nursing Program. The questionnaire should take approximately one hour to complete. Your cooperation is invaluable to the completion of this project.

Thank you

SCHOOL and FACULTY CHARACTERISTICS

Number of students presently registered in your generic nursing the program during the September - December 1990 school term.

	NUMBER of STUDENTS
1). 1st year	1)_____
4). 2nd year	4)_____
7). 3rd year	7)_____
10). 4th year	10)_____

Does your school of nursing presently offer the following programs? Please circle either YES or NO after each option.

13). Generic Bachelor of Nursing or Nursing Science	13) YES	NO
14). BScN, BSN or BN for returning R.N.'s	14) YES	NO
15). Masters of Science in Nursing	15) YES	NO
16). Certificate program in Gerontology	16) YES	NO
17). Masters of Science in Nursing - Gerontology	17) YES	NO
18). Masters program in Gerontology	18) YES	NO
19). Doctoral Nursing program	19) YES	NO

20). What is the total number of nursing faculty who teach in the <u>generic baccalaureate nursing program</u>?

20)_____

Please indicate the number of nursing faculty teaching in the <u>generic baccalaureate nursing program</u> (Question # 20), who have the following degrees. (Report the highest degree only.)

	NUMBER
21). Baccalaureate degree in nursing with gerontology focus	21)_____
23). Baccalaureate degree in nursing with another focus	23)_____
25). Masters with Gerontology specialty	25)_____
27). Masters with another specialty	27)_____
29). PhD or EdD with Gerontology specialty	29)_____
31). PhD or EdD in another specialty	31)_____

33). How many faculty, who teach in the generic baccalaureate nursing program, have adjunct or joint appointments with a clinical agency with a gerontology focus? 33)_____

35). Were there any gerontological research or demonstration projects completed by faculty in your generic baccalaureate nursing program during the two year period from January 1989 to December 1990? (Circle either YES or NO.)

35) YES

36). If YES, please give the title of up to three of these projects.

_____

_____

_____

37). Does your school have a special committee or person whose task is to develop gerontological courses or programs? (Circle either YES or NO.)

37) YES

38). Which nursing model is your school presently using?

38)_____

39). How has this model been used in developing gerontological education in your generic baccalaureate nursing program?

_____

_____

_____

CURRICULUM

The following questions relate to the gerontology curriculum in your generic baccalaureate nursing program. Please answer all the following statements by circling YES or NO for each statement:-

The gerontology content is...

40). totally integrated throughout the program. 40) YES

41). partially integrated in nursing courses. 41) YES

42). required in specific gerontology course. 42) YES

43). elective in specific gerontology course. 43) YES

44). Other. Please specify _____

CONTENT

It will be helpful to know what, how and when the topics in gerontology are offered in your generic baccalaureate nursing program. Please circle 1). A letter after each topic to indicate in which type of course this subject matter is offered; and (2). One number for the year of the program the subject is typically taught.
(Please circle a letter and a number for EACH item).

PLACEMENT of CONTENT in PROGRAM

Integrated in nursing course (I)
In specific nursing courses (S)
Other discipline courses (O)
Not offered (N)

			Integrated	Specific	Other	Not required	YEAR			
45).	Theories of aging	45).	I	S	O	N	1	2	3	4
47).	Developmental tasks of later life	47).	I	S	O	N	1	2	3	4
49).	Personality development	49).	I	S	O	N	1	2	3	4
51).	Cognitive functioning	51).	I	S	O	N	1	2	3	4
53).	Normative losses with aging	53).	I	S	O	N	1	2	3	4
55).	Successful aging and well being	55).	I	S	O	N	1	2	3	4
57).	Patterns of coping	57).	I	S	O	N	1	2	3	4
59).	Psychological adaptation to aging	59).	I	S	O	N	1	2	3	4
61).	Demographics of aging(future trends)	61).	I	S	O	N	1	2	3	4
63).	Characteristics of older population	63).	I	S	O	N	1	2	3	4
65).	Elderly in Society	65).	I	S	O	N	1	2	3	4
67).	Governments response to aging	67).	I	S	O	N	1	2	3	4
69).	Economics of aging	69).	I	S	O	N	1	2	3	4
71).	Political power of the elderly	71).	I	S	O	N	1	2	3	4
73).	Legal issues related to aging	73).	I	S	O	N	1	2	3	4
75).	Family Relationships	75).	I	S	O	N	1	2	3	4
77).	Ethical Issues related to aging	77).	I	S	O	N	1	2	3	4
79).	Ethnic Elderly issues	79).	I	S	O	N	1	2	3	4
81).	Gender issues related to aging	81).	I	S	O	N	1	2	3	4
83).	Diversity in aging population	83).	I	S	O	N	1	2	3	4
85).	Attitudes toward the elderly	85).	I	S	O	N	1	2	3	4
87).	Advocacy for elderly health care	87).	I	S	O	N	1	2	3	4
89).	Health Promotion	89).	I	S	O	N	1	2	3	4
91).	Community resources for the elderly	91).	I	S	O	N	1	2	3	4
93).	Normal physical changes in aging	93).	I	S	O	N	1	2	3	4
95).	Common health problems with aging	95).	I	S	O	N	1	2	3	4
97).	Common Diseases of the elderly	97).	I	S	O	N	1	2	3	4
99).	Pathological cognitive deficiencies	99).	I	S	O	N	1	2	3	4
101).	Pharmacology and the older adult	101).	I	S	O	N	1	2	3	4
103).	Nutrition and the elderly	103).	I	S	O	N	1	2	3	4

PLACEMENT of CONTENT in PROGRAM (CONTINUED)
Please circle a letter and a number for each item)

Integrated in Nursing course (I)
In specific nursing course (S)
Other discipline course (O)
Not offered (N)

		Integrated	Specific	Other	Not required	YEAR			
105). Principles of rehabilitation	105).	I	S	O	N	1	2	3	4
107). Principles of activation	107).	I	S	O	N	1	2	3	4
109). Principles of palliative care	109).	I	S	O	N	1	2	3	4
111). History of Gerontological nursing	111).	I	S	O	N	1	2	3	4
113). Gerontology: interdisciplinary field	113).	I	S	O	N	1	2	3	4
115). Research in Gerontology	115).	I	S	O	N	1	2	3	4
117). Organization of health care for the frail elderly	117).	I	S	O	N	1	2	3	4
119). Nursing process and the elderly	119).	I	S	O	N	1	2	3	4
121). Holistic health assessment	121).	I	S	O	N	1	2	3	4
123). Functional assessment	123).	I	S	O	N	1	2	3	4
125). Mental Health Assessment	125).	I	S	O	N	1	2	3	4
127). Behavior assessment	127).	I	S	O	N	1	2	3	4
129). Assessment of social supports	129).	I	S	O	N	1	2	3	4
131). Assessment of environment and its impact on independence	131).	I	S	O	N	1	2	3	4
133). Discharge planning for older adults	133).	I	S	O	N	1	2	3	4
135). Strategies for teaching the older adult	135).	I	S	O	N	1	2	3	4
137). Leadership skills required in geriatric settings	137).	I	S	O	N	1	2	3	4
139). Communicating with cognitively impaired elderly	139).	I	S	O	N	1	2	3	4
141). Communicating with sensory impaired adults	141).	I	S	O	N	1	2	3	4
143). Other Topic:_____	143).	I	S	O	N	1	2	3	4
145). Other. Topic:_____	145).	I	S	O	N	1	2	3	4

In the generic baccalaureate program in your school, what is the minimum number of hours required in the following clinical areas over the four years?

147). Medical - Surgical Nursing 147)_____ hrs

150). Maternal Child Nursing 150)_____ hrs

153). Psychiatric/Mental Health Nursing 153)_____ hrs

156). Gerontological Nursing 156)_____ hrs

159). Community Health Nursing 159)_____ hrs

PATIENT PROBLEMS and CARE TECHNIQUES

The following health care problems and nursing care interventions are commonly found when working with the elderly. Please circle a letter after each problem to indicate 1). How it is taught; and 2). If it is taught in a required or elective course.

Didactic sessions only (seminar, lecture) (D)
Clinical only (clinical teaching) (C)
Both didactic and clinical sessions (B)

Taught in a required course (R)
Taught in an elective course (E)

			Didactic	Clinical	Both	Required	Elective
162).	Falls	162).	D	C	B	R	E
164).	Decreased mobility	164).	D	C	B	R	E
166).	ADL deficits	166).	D	C	B	R	E
168).	Nutritional deficits	168).	D	C	B	R	E
170).	Sensory losses	170).	D	C	B	R	E
172).	Skin breakdown	172).	D	C	B	R	E
174).	Incontinence	174).	D	C	B	R	E
176).	Constipation	176).	D	C	B	R	E
178).	Polypharmacy	178).	D	C	B	R	E
180).	Loneliness/isolation	180).	D	C	B	R	E
182).	Relocation stress	182).	D	C	B	R	E
184).	Sleep deficit	184).	D	C	B	R	E
186).	Acute confusion	186).	D	C	B	R	E
188).	Dementia	188).	D	C	B	R	E
190).	Depression	190).	D	C	B	R	E
192).	Aggressive behavior	192).	D	C	B	R	E
194).	Chronic pain	194).	D	C	B	R	E
196).	Acute pain	196).	D	C	B	R	E
198).	Physical and/or psychological abuse	198).	D	C	B	R	E
200).	Substance abuse	200).	D	C	B	R	E
202).	Financial abuse	202).	D	C	B	R	E
204).	Restraints/Nonrestraints	204).	D	C	B	R	E
206).	Socialization therapies eg. life review	206).	D	C	B	R	E
208).	Lifting and transfer techniques	208).	D	C	B	R	E
210).	Use of mobility aids eg. walker	210).	D	C	B	R	E
212).	Use of hygienic aids eg. Century tub	212).	D	C	B	R	E
214).	Use of communication aids	214).	D	C	B	R	E
216).	Feeding assistive techniques	216).	D	C	B	R	E

CLINICAL EXPERIENCE

Please specify the average number of required hours students in the generic baccalaureate nursing program (1) Spend in the following field placements and (2) The year in which they are most likely to have this clinical experience. (Circle the typical year.)

	HOURS	YEARS
Private Residence of Older Person	218)_____	220) 1 2 3 4
Senior Center or Club	221)_____	223) 1 2 3 4
Wellness Clinic	224)_____	226) 1 2 3 4
Acute Care Hospital	227)_____	229) 1 2 3 4
Rehabilitation Hospital	230)_____	232) 1 2 3 4
Chronic/Long term Care Unit	233)_____	235) 1 2 3 4
Seniors Day Care Unit	236)_____	238) 1 2 3 4
Psychogeriatric Unit	239)_____	241) 1 2 3 4

242). Which of the following health-illness continuums best fits your school curriculum focus?
(select only one number on the right).

HEALTH - - - - - - - ILLNESS	242).
1. Absence of disease --- presence of disability/disease	1.
2. Fulfills social roles --- failure to fulfill roles	2.
3. Adapts to environment --- unable to adapt	3.
4. Sense of well being --- languishing debility	4.

243). Has your generic baccalaureate nursing program made any changes in gerontological content or clinical experience over the past 5 years? (Circle either YES or NO.)

243). YES NO

244). If YES, describe the changes:

245). Does your generic baccalaureate nursing program plan to make any changes in gerontological content or clinical experience during the next 2 years? (Circle either YES or NO.)

245). YES NO

246). If YES, describe the changes:

WORK SETTING

247). Do you have a clinical consolidation/practicum in the last year of your program? 247). YES NO

248). If yes, what percentage of students graduating in 1991 have chosen to do this in a gerontological setting?

248). _____%

249). Would you like a summary of this report? (Circle YES or NO). If yes, please complete the address form below.

249). YES NO

Thank you for taking the time to complete this questionnaire.

Anne Earthy RN, BN
Graduate student(MA)

Please provide your:

NAME_____

TITLE/POSITION_____

MAILING ADDRESS _____
Street

_____
City Postal Code

_____ _____
Telephone Number FAX Number

DATE_____

THE UNIVERSITY OF BRITISH COLUMBIA

Appendix C.

Adult Education
Department of Administrative,
Adult and Higher Education
5760 Toronto Road
Vancouver, B.C. Canada V6T 1L2
Tel: (604) 822-5881
Fax: (604) 822-6679

March 20, 1991

Dear

I am a Master of Arts student in Adult Education at the University of British Columbia. I am requesting your assistance as I believe that your contribution will be invaluable to my study and will benefit the development of gerontological nursing programs in Canada. The focus of my research thesis is, "Gerontological Curriculum in Canadian Generic Baccalaureate Nursing Programs".

The enclosed questionnaire asks questions about what content and clinical experiences you believe should be included in generic nursing curriculums in Canada. You have been identified as an expert in the field of gerontological nursing by your provincial Gerontological Nursing Practice Group.

The questionnaire will take approximately one hour to complete. It is assumed that by completing the questionnaire you are consenting to participate in the study. If you are unable to complete the questionnaire please contact me to discuss the selection of an alternate respondent.

I would appreciate receiving the completed questionnaire within the next two weeks. If I do not receive your completed questionnaire by April 15th I will contact you to assist with completion of the questionnaire. Your responses will be kept confidential. All questionnaires will be destroyed when the research project is completed.

I would like to thank you now for your cooperation and support. If you have any difficulties please do not hesitate to call me or my advisor.

Sincerely,

Anne Earthy RN, BN.
(604) 266 - 8408 (Home)
(604) 875 - 4433 (Work)

James Thornton Ph.D.
(604) 228 - 5881

Appendix D.

SURVEY OF 'EXPERT' OPINION ON GERONTOLOGICAL CURRICULA IN CANADIAN GENERIC BACCALAUREATE SCHOOLS of NURSING

This survey has been designed to gather opinions of experts in the field of gerontological nursing on how best to organize, design and present gerontological curricula in schools of nursing in generic baccalaureate nursing programs.

Please answer the following questions. It should take approximately one hour to complete.

Your cooperation is invaluable to the completion of this project.
Thank you.

DEMOGRAPHICS

1). Please circle the number in the right hand column that indicates your highest level of education.
(Select only one) 1).

1. Diploma in Nursing	1.
2. Post RN Certificate	2.
3. Baccalaureate degree in nursing	3.
4. Masters in Nursing	4.
5. Masters in other than nursing	5.
6. Doctorate in Nursing	6.
7. Doctorate in other than Nursing	7.

2). Please circle the number that indicates your clinical area of practice.
(Select only one) 2).

INSTITUTION	
1. Acutely ill elderly	1.
2. Psycho - geriatrics	2.
3. Long-term/extended care	3.
4. Rehabilitation care	4.
COMMUNITY	
5. Long-term care	5.
6. Home care	6.
7. Preventive health	7.
9. OTHER	9.

3). Please circle the number that represents your <u>primary</u> nursing responsibilty.
(Select only one) 3).

1. Research	1.
2. Administration	2.
3. Education	3.
4. Clinical practice	4.

4). Have you attended a gerontological continuing education program or conference in the past year? (Circle either YES or NO.) 4) YES NO

5). Are you currently participating in any gerontological demonstration/pilot project? (Circle either YES or NO.) 5) YES NO

6). Are you currently participating in any gerontological research? (Circle either YES or NO). 6) YES NO

7). If YES to questions 5 and/or 6, please state the title of up to three of these projects.

_____

_____

_____

8). Is there a particular nursing model that you consider to be most appropriate for gerontological nursing? 8) YES NO

9). If yes, please specify_____

10). Which of the following health-illness continuums best fits your philosophy of gerontological nursing? (Circle only one number on the right).

HEALTH - - - - - - - - - ILLNESS	10)
* Absence of disease --- presence of disability or disease	1.
* Fulfills social roles --- failure to fulfill roles	2.
* Adapts to environment --- unable to adapt	3.
* Sense of well-being --- languishing debility	4.

CURRICULUM

The following questions relate to the gerontological content in the curriculum. Please answer the following statements considering how you would like to see gerontological content presented in generic baccalaureate nursing programs. (Circle either YES or NO for EACH item).

The gerontology content should be...

11). totally integrated throughout the program. 11). YES NO

12). partially integrated in specific courses. 12). YES NO

13). required in a specific gerontology course. 13). YES NO

14). elective in a specific gerontology course. 14). YES NO

15). Other. Please specify_____

PLACEMENT of CONTENT in PROGRAM (CONTINUED)
(Please circle a letter and a number for EACH item).

Integrated in nursing courses (I)
In specific nursing courses (S)
Other discipline courses (O)
Not required (N)

		Integrated	Specific	Other	Not offered	YEAR			
68). Advocacy for elderly health care	68).	I	S	O	N	1	2	3	4
70). Health Promotion	70).	I	S	O	N	1	2	3	4
72). Community resources for the elderly	72).	I	S	O	N	1	2	3	4
74). Normal physical changes in aging	74).	I	S	O	N	1	2	3	4
76). Common health problems with aging	76).	I	S	O	N	1	2	3	4
78). Common diseases of the elderly	78).	I	S	O	N	1	2	3	4
80). Pathological cognitive deficiencies	80).	I	S	O	N	1	2	3	4
82). Pharmacology and the older adult	82).	I	S	O	N	1	2	3	4
84). Nutrition and the elderly	84).	I	S	O	N	1	2	3	4
86). Principles of rehabilitation	86).	I	S	O	N	1	2	3	4
88). Principles of activation	88).	I	S	O	N	1	2	3	4
90). Principles of palliative care	90).	I	S	O	N	1	2	3	4
92). History of Gerontological nursing	92).	I	S	O	N	1	2	3	4
94). Gerontology: Interdisciplinary field	94).	I	S	O	N	1	2	3	4
96). Research in Gerontology	96).	I	S	O	N	1	2	3	4
98). Organization of health care for the frail elderly	98).	I	S	O	N	1	2	3	4
100). Nursing process and the elderly	100).	I	S	O	N	1	2	3	4
102). Holistic health assessment	102).	I	S	O	N	1	2	3	4
104). Functional assessment	104).	I	S	O	N	1	2	3	4
106). Mental Health Assessment	106).	I	S	O	N	1	2	3	4
108). Behavior assessment	108).	I	S	O	N	1	2	3	4
110). Assessment of social supports	110).	I	S	O	N	1	2	3	4
112). Assessment of environment and its impact on independence	112).	I	S	O	N	1	2	3	4
114). Discharge planning for older adults	114).	I	S	O	N	1	2	3	4
116). Strategies for teaching the older adult	116).	I	S	O	N	1	2	3	4
118). Leadership skills required in geriatric settings	118).	I	S	O	N	1	2	3	4
120). Communicating with cognitively impaired elderly	120).	I	S	O	N	1	2	3	4
122). Communicating with sensory impaired adults	122).	I	S	O	N	1	2	3	4
124). Other. Topic:_____	124).	I	S	O	N	1	2	3	4
126). Other. Topic:_____	126).	I	S	O	N	1	2	3	4

PATIENT PROBLEMS and CARE TECHNIQUES

As an expert in gerontological nursing how do you believe the following patient problems and care techniques of the elderly should be addressed in the generic baccalaureate nursing program? Please circle
(1) A letter to indicate how each problem should be taught; and
(2) Whether it should be included in a required or elective course?

Didactic sessions only (seminar, lecture) (D)
Clinical only (incidental clinical teaching) (C)
Both Didactic and Clinical sessions (B)

Taught in a required course (R)
Taught in an elective course (E)

		How Taught			Course	
		Didactic	Clinical	Both	Required	Elective
128).	Falls	128). D	C	B	R	E
130).	Decreased mobility	130). D	C	B	R	E
132).	ADL deficits	132). D	C	B	R	E
134).	Nutritional deficits	134). D	C	B	R	E
136).	Sensory losses	136). D	C	B	R	E
138).	Skin breakdown	138). D	C	B	R	E
140).	Incontinence	140). D	C	B	R	E
142).	Constipation	142). D	C	B	R	E
144).	Polypharmacy	144). D	C	B	R	E
146).	Loneliness/isolation	146). D	C	B	R	E
148).	Relocation stress	148). D	C	B	R	E
150).	Sleep deficit	150). D	C	B	R	E
152).	Acute Confusion	152). D	C	B	R	E
154).	Dementia	154). D	C	B	R	E
156).	Depression	156). D	C	B	R	E
158).	Aggressive behavior	158). D	C	B	R	E
160).	Chronic pain	160). D	C	B	R	E
162).	Acute pain	162). D	C	B	R	E
164).	Physical and/or psychological abuse	164). D	C	B	R	E
166).	Substance abuse	166). D	C	B	R	E
168).	Financial abuse	168). D	C	B	R	E
170).	Restraints/Nonrestraints	170). D	B	C	R	E
172).	Socialization therapies eg. life review	172). D	B	C	R	E
174).	Lifting and transfer techniques	174). D	B	C	R	E
176).	Use of mobility aids eg. walker	176). D	B	C	R	E
178).	Use of hygienic aids eg. Century tub	178). D	B	C	R	E
180).	Use of communication aids	180). D	B	C	R	E
182).	Feeding assistive techniques	182). D	B	C	R	E

CLINICAL EXPERIENCE

For what purpose do you think students should be placed in the following clinical placements?

184). Private Residence of Older Person
Purpose:_____

185). Senior Center or Club
Purpose:_____

186). Wellness Clinic
Purpose:_____

187). Hospitalized older Adults (acute care)
Purpose :_____

188). Rehabilitation Hospital
Purpose :_____

189). Chronic/ Long Term Care Facility
Purpose :_____

190). Seniors Day Care Unit
Purpose : _____

191). Psychogeriatric Unit
Purpose :_____

192). Other. Name :
Purpose :-_____

WORK SETTING

193). Do you believe registered nurses providing geriatric care today are properly prepared to work with older clients? (Circle YES or NO.)

193). YES NO

194). If NO, please elaborate.

195). What do you consider to be critical to the graduates decision to work in gerontology?

196). What suggestions do you have for preparing generic baccalaureate students to work with older persons?

197). Would you like a summary of this report? (Circle YES or NO.) If yes, please complete the address form below.

197). YES NO

Thank you for taking the time to complete this questionnaire.

Anne Earthy RN, BN
Graduate Student (MA)

.....

Questionnaire Completed by :

NAME_____

TITLE/POSITION_____

MAILING ADDRESS_____
Street

_____
City Postal Code

DATE_____

Appendix E.

Profile of Schools by Number of Students, Nursing and Gerontology Programs Offered at the University, Total Nursing Faculty and Number of Nursing Faculty with Graduate Degree in Gerontology.

Nursing School	Number of Students	Programs Offered at University	Total Nursing Faculty	Nursing Faculty with Graduate Degree in Gerontology
1.	440	BN, Mn	30	1
2.	417	BN, MN, MN(gerontology), Masters in Gerontology	32	0
3.	379	BN	38	3
4.	359	BN, MN. MN(gerontology)	71	1
5.	353	BN, MN, PhD	52	4
6.	330	BN, MN	28	2
7.	316	BN, Certificate in Gerontology	17	0
8.	293	BN, MN	40	3
9.	271	BN	40	7
10.	269	BN, MN	26	0
11.	238	BN	23	1
12.	229	BN, MN, MN(gerontology)	28	1
13.	215	BN	20	1
14.	204	BN	13	0
15.	201	BN, MN, MN(gerontology)	27	2
16.	195	BN	13	0
17.	182	BN, Certificate in gerontology	15	1
18	172	BN, MN, Certificate in gerontology	20	1
19.	124	BN	9	0
20.	113	BN, MN, PhD	8	0
Total	5300		550	27

Note:- BN=Baccalaureate degree in Nursing. All surveyed schools offered generic and post RN programs.
MN=Masters of Science in Nursing or Masters in Nursing
MN(gerontology)= Masters of Science in Nursing or Masters in Nursing with a gerontological focus.
PhD in Nursing= Doctoral on Nursing
Masters in Gerontology= refers to a non-nursing program in gerontology.
Certificate in Gerontology:- A non-nursing program in gerontology.

Appendix F.

Topics of Gerontology and Demonstration Projects Conducted by Faculty of Surveyed Canadian Generic Baccalaureate Nursing Schools

1. Survey of Practice Problems Identified by Nurses and Their Assistants in a Long-Term Care Setting.
2. Home Maintenance of People Suffering from Losses of Autonomy: The Burden of Principle Care Givers.
3. Development of Joint Advanced Certificate Program in Gerontology with the Local College.
4. Alzheimer's
5. Health of the Elderly
6. Reaching the Rural Elderly (an exercise program)
7. Prevention of Falls by Adjusting Staffing in a Nursing Home.
8. Urinary Tract Infection in a Nursing Home-Whose at Risk?
9. Evaluation of a Self-Medication Program in a Rehabilitation Setting.
10. Needs Assessment of a Geriatric Centre.
11. Identifying Health Promotion and Health Maintenance
12. Needs of Older Adults in the Community.
13. Elder Mistreatment: Lived Experiences.
14. National Survey of Elder Abuse in Canada.
15. Elder Anglo-Canadian Husbands as Caregivers.
16. Preferences for Institutional Placement Control.
17. Health Promotion of the Elderly
18. Aged Persons with Cognitive Disorders with Alzheimers

(continued)

Appendix F.continued.

19. Predictors of Well-Being of Caregivers

20. Congregation or Separation of Patients.

21. Decision Making Process of Caregiver

22. Well Elderly Couples Living at Home.

23. Validation Therapy.

24. Comparison of Two Gerontology Programs

25. Ethnic Elder Content in Canadian Nursing Programs.

26. A Randomized Trial of the Effectiveness and Efficiency of an Enriched Program of Care for the High-Risk Elderly in an Acute Care Hospital: Effects on Moral, Functional Ability, Discharge Disposition, Length of Stay.

27. An Enriched Programme of Care for High Risk Elderly in Acute Care Institutions.

28. Psychosocial Adjustment to Bereavement in the Older Widow.

Appendix G.

Topics of Gerontological Research or Demonstration/Pilot Projects Conducted by Surveyed Reputational "Experts".

---

1. Balance Study.
2. Sources of Stress for Adult Children Caregivers of Institutionalized Elderly Parents.
3. Program Evaluation. Health and Welfare Canada.
4. Program Director Alzheimer Support Program
5. Community Based Multiservice Respite Program.
6. Characteristics of Vocally Disruptive Frail Elderly
7. Teaching Gerontological Content in First Year RN Students: a New Approach.
8. Self=Care Incontinence Project
9. Ventilatory Assisting Devices Project
10. Community I.V. Therapy Program
11. Patient Care Problems Identified by Nurses in a Long Term Care Setting.
12. Women and Aging-Menapause
13. Resident Regrouping
14. Restraint Free Policy
15. Alzheimer and Dementia Family Support Group.
16. Educational Series for Alzheimers Disease Caregivers
17. Skin Care Program
18. Incontinence Protocol
19. Resident Services Steering Committee Pilot Project, the Province of New Brunswick

(continued)

Appendix G. continued.

20. Elder Hostel

21. Light Project-Comparison of the Effect of "Warm White" Light and "Full Spectrum " Light on Seasonal Affective Disorder

22. Prevalence of Mental Disorders in a Nursing Home.

23. Effect of Long Term Care Model on Resident and Staff.

24. Can Contractures be Prevented in Residents of Extended Care Units.

25. To Segregate or Integrate (Lucid and Confuced Residents) in Extended Care Settings.

26. Bowel Routines in the Institutionalized Elderly.

27. Interventions with Behavioral Problems.

28. Analysis of Aggression in the Demented Elderly and Stress in Professional Caregivers.

29. Salem Home Special Care Unit: Behavioral Modification Program for Aggressive Elderly in Long Term Care.

30. Development of Assessment (Functional) Instrument to Facilitate Community-Based Services Placement

31. Primary Health Care Project

Appendix H.

Profile of Schools by Type of Curriculum and Specific Course Option

School	Integrated Curriculum		Specific Course	
	Totally throughout program	Partially in Nursing courses	Gerontology Required	Elective
1..	X	-	-	-
2.	X	-	-	-
3.	X	-	-	-
4.	X	-	-	-
5.	X	-	-	-
6.	X	-	-	-
7.	X	-	-	X
8.	X	-	-	X
9.	X	-	-	X
10	X	-	-	X
11.	-	X	-	-
12.	-	X	-	-
13.	-	X	-	-
14.	-	X	-	-
15.	-	X	-	X
16.	-	X	-	X
17.	-	X	-	X
18.	-	X	X	X
19	-	-	X	-
20.	-	-	X	-

Appendix I.

Listing of Gerontological Topics Taught by Generic Baccalaureate Nursing Schools by Curricula Type.

Gerontology Topic	Curriculum Type (percentage of responses)			
	I	S	O	N
Theories of aging	35	55	10	-
Developmental tasks of late life	45	45	10	-
Personality development	30	40	25	5
Cognitive functioning	25	65	10	-
Normative losses of aging	40	60	-	-
Successful aging/well being	40	55	5	-
Patterns of coping	55	40	5	-
Psychological adaptation to aging	40	50	10	-
Demographics of aging	45	55	-	-
Characteristics of older population	45	55	-	-
Elderly in society	50	45	-	5
Economics of aging	45	25	-	30
Governments' response to elderly	60	30	-	10
Economics of aging	45	25	-	30
Political power of the elderly	45	30	-	25
Legal issues and aging	40	35	-	25
Family relationships	45	50	5	-
Ethical issues related to aging	45	40	5	10
Ethnic elderly issues	45	20	-	35
Gender issues and aging	40	35	5	20
Diversity in aging population	35	40	25	-
Attitudes toward the elderly	50	45	-	5
Advocacy for elderly care	50	35	-	15
Health promotion	55	45	-	-
Community resources for the elderly	50	50	-	-
Normal physical changes	40	60	-	-
Common health problems	55	35	5	5
Common diseases of the elderly	55	40	-	5
Cognitive deficiencies	50	45	-	5
Pharmacology and the elderly	35	45	10	10
Nutrition and the elderly	50	40	5	5

(continued)

Appendix I continued.

Gerontology Topic	Curriculum Type (percentage of responses)			
	I	S	O	N
Principles of rehabilitation	60	25	-	15
Principles of activation	60	30	-	10
Palliative care	60	30	-	10
History of gerontological nursing	10	20	-	70
Interdisciplinary field	45	25	5	5
Research in gerontology	55	30	10	5
Organization of health care for the frail elderly	40	35	-	25
Nursing process and the elderly	60	35	-	5
Holistic health assessment	60	40	-	-
Functional assessment	50	45	-	5
Mental assessment	55	40	-	5
Behavior assessment	55	40	-	5
Assessment of social supports	55	40	-	5
Environmental assessment	55	25	-	10
Discharge planning	55	25	-	20
Teaching older adults	50	45	-	5
Leadership skills for geriatrics	45	25	-	30
Communicating with the cognitively impaired	45	40	-	15
Communicating with the sensory impaired	45	40	-	15

NOTE: I= Integrated in nursing courses
S= In specific nursing course
O= Other discipline course
N= Not offered

Appendix J

Schools' Responses to the Year Each Topic is Taught in the Generic Baccalaureate Nursing Programs.

Gerontology Topic	Year Low Mean - High Mean
Theories of aging	1.8 - 2.3
Developmental tasks of later life	1.6 - 2.2
Personality development	2.0 - 2.3
Cognitive functioning	1.9 - 2.1
Normative losses of aging	1.8 - 2.4
Successful aging and well-being	1.9 - 2.7
Patterns of coping	2.1 - 2.8
Psychological adaptation	2.0 - 2.7
Demographics of aging	2.1 - 2.9
Characteristics of older population	2.4 - 2.9
Elderly in society	2.3 - 3.1
Governments' response to aging	2.6 - 3.1
Economics of aging	2.9 - 3.5
Political power of the elderly	2.8 - 3.3
Legal issues related to aging	2.9 - 3.7
Family relationships	2.5 - 3.2
Ethical issues related to aging	2.4 - 3.2
Ethnic elderly issues	2.4 - 3.5
Gender issues related to aging	2.1 - 2.9
Diversity in older population	2.5 - 3.0
Attitudes toward the elderly	1.8 - 2.6
Advocacy for elder health care	2.8 - 3.4
Health promotion	2.1 - 2.9
Community resources for the elderly	2.5 - 3.2
Normal physical changes in aging	1.8 - 2.3
Common health problems with aging	2.3 - 2.7
Common diseases of the elderly	2.4 - 2.9
Pathological cognitive deficiencies	2.4 - 2.8
Pharmacology and the elderly	2.3 - 2.8
Nutrition and the elderly	2.0 - 2.6

(continued)

Appendix J Continued.

Gerontology Topic	Year Low Mean - High Mean
Principles of rehabilitation	2.5 - 2.9
Principles of activation	2.6 - 2.9
Principles of palliative care	2.8 - 3.2
History of gerontological nursing	3.0 - 3.5
Gerontology:Interdisciplinary field	2.5 - 3.2
Research in gerontology	2.8 - 3.3
Organization of health care for the frail elderly	2.6 - 3.5
Nursing process and the elderly	1.8 - 3.0
Holistic health assessment	2.0 - 2.7
Functional assessment	2.1 - 2.7
Mental health assessment	2.2 - 3.1
Behavior assessment	2.2 - 3.3
Assessment of social supports	2.2 - 2.9
Assessment of environmental and independence	2.5 - 2.9
Discharge planning for older adults	2.1 - 2.8
Teaching older adults	2.2 - 2.7
Leadership skills in geriatric settings	3.6 - 3.8
Communicating with the cognitively impaired	2.5 - 3.1
Communicating with the sensory impaired	2.4 - 3.0

Note:- Years reported are low mean to high mean

Appendix K.

Year Gerontology Topic is Taught in Generic Baccalaureate Schools of Nursing.

Gerontology Topic	Year Mean High - Low
Topics that appear to be taught in 1st and 2nd year.	
Developmental tasks	1.6 - 2.2
Normal physical changes	1.8 - 2.3
Theories of aging	1.8 - 2.3
Normal losses of aging	1.8 - 2.4
Cognitive functioning	1.9 - 2.1
Personality development	2.0 - 2.3
Nutrition and the elderly	2.0 - 2.6
Communicating with the sensory impaired	2.0 - 2.6
Holistic Health Assessment	2.0 - 2.7
Psychological adaptation	2.0 - 2.7
Functional assessment	2.1 - 2.7
Discharge planning	2.1 - 2.8
Patterns of coping	2.1 - 2.8
Teaching older adults	2.2 - 2.7
Social supports	2.2 - 2.9
Common health problems	2.3 - 2.7
Pharmacology & the elderly	2.3 - 2.8
Cognitive deficiencies	2.4 - 2.8
Common diseases	2.4 - 2.9
Characteristics of population	2.4 - 2.9
Principles of rehabilitation	2.5 - 2.9
Principles of activation	2.6 - 2.9
Diversity of older population	2.5 - 3.0
Topics that appear to be taught in 3rd and 4th year	
Communicating with the cognitively impaired	2.5 - 3.1
Interdisciplinary field	2.5 - 3.2
Community resources	2.5 - 3.2
Family relationships	2.5 - 3.2
Governments response	2.6 - 3.1
Palliative care	2.8 - 3.2
Political power of the elderly	2.8 - 3.3
Research in gerontology	2.8 - 3.3

(continued)

Appendix K Continued

Gerontology Topic	Year Mean High Low
Advocacy for the elderly	2.8 - 3.4
Economics of aging	2.9 - 3.5
History of gerontological nursing	3.0 - 3.5
Leadership goals	3.6 - 3.8
Topics that appear to be taught across all 4 years:- (Mean spread greater than .8)	
Attitudes toward the elderly	1.8 - 2.6
Nursing process	1.8 - 3.0
Successful aging	1.9 - 2.7
Health promotion	2.1 - 2.9
Demographics of aging	2.1 - 2.9
Gender issues	2.1 - 2.9
Mental assessment	2.2 - 3.1
Behavior assessment	2.2 - 3.1
Elderly in society	2.3 - 3.1
Ethical issues	2.4 - 3.2
Ethnic elderly	2.4 - 3.5
Organization of health care	2.6 - 3.5
Legal issues	2.9 - 3.7

Appendix L.

"Experts'" Opinions of What Gerontological Topics Should be Taught in Generic Nursing Programs by Curriculum Type.

Gerontology Topic	Curriculum Type			
	I	S	O	N
	(percentage of responses)			
Theories of aging	28	59	14	-
Developmental tasks of late life	52	35	14	-
Personality development	65	10	24	3
Cognitive functioning	41	31	28	-
Normal losses of aging	35	55	10	-
Successful aging	28	69	3	-
Patterns of coping	66	17	17	-
Psychological adaptation	31	59	11	-
Demographics of aging	31	52	17	-
Characteristics of older population	28	59	14	-
Elderly in society	31	52	17	-
Economics of aging	21	45	31	3
Governments' response to aging	21	45	31	-
Political power of the elderly	24	35	38	3
Legal issues and aging	24	48	21	7
Family relationships	69	17	14	-
Ethical issues related to aging	59	31	10	-
Ethnic elderly issues	48	35	17	-
Gender issues related to aging	48	28	21	3
Diversity in older population	35	45	17	3
Attitudes toward the elderly	55	35	10	-
Advocacy for elder health care	38	52	7	3
Health promotion	83	10	3	3
Community resources for elderly	38	52	10	-
Normal physical changes in aging	66	31	3	-
Common health problems with aging	62	38	-	-
Common diseases of the elderly	52	45	-	3
Cognitive deficiencies	28	69	3	-
Pharmacology and the elderly	35	59	7	-
Nutrition and the elderly	59	31	10	-

(continued)

Appendix L continued.

Gerontology Topic	Curriculum Type			
	I	S	O	N
	(percentage of responses)			
Principles of rehabilitation	83	17	-	-
Principles of activation	79	21	-	-
Principles of palliative care	69	31	-	-
History of gerontological nursing	28	66	-	-
Interdisciplinary field	35	49	17	-
Research in gerontology	21	62	14	-
Organization of health care for the frail elderly	35	59	7	-
Nursing process and the elderly	76	24	-	-
Holistic health assessment	76	21	3	-
Functional assessment	62	38	-	-
Mental health assessment	59	41	-	-
Behavior assessment	59	41	-	-
Assessment of social supports	55	35	10	-
Assessment of environmental	66	28	7	-
Discharge planning for older adults	52	48	-	-
Teaching older adults	45	48	3	3
Leadership skills for geriatrics	45	52	-	3
Communicating with the cognitively impaired	41	59	-	-
Communicating with the sensory impaired	55	45	-	-

Note:- I= Integrated in nursing course
S= In specific nursing course
O= Other discipline course
N= not offered

Appendix M.

"Experts'" Responses to the Year Each Topic Should be Taught in a Generic Baccalaureate Nursing Program.

Gerontology Topic	Year Low Mean	High Mean
Theories of aging	1.9	2.0
Developmental tasks	1.8	1.9
Personality development	1.6	1.8
Cognitive functioning	1.9	2.0
Normative losses of aging	2.1	2.2
Successful aging	2.0	2.0
Patterns of coping	1.9	2.4
Psychological adaptation to aging	2.2	2.3
Demographics of aging	2.7	2.7
Characteristics of older population	2.3	2.3
Elderly in society	2.5	2.6
Governments' response to aging	2.9	2.9
Economics of aging	2.8	2.8
Political power of the elderly	3.2	3.2
Legal issues related to aging	3.2	3.2
Family relationships	2.0	2.1
Ethical issues related to aging	2.6	2.6
Ethnic elderly issues	2.5	2.5
Gender issues related to aging	2.6	2.6
Diversity in aging population	2.4	2.4
Attitudes toward the elderly	1.7	1.7
Advocacy for elder health care	3.4	3.4
Health promotion	2.4	2.7
Community resources for elderly	3.2	3.2
Normal physical changes in aging	1.5	1.6
Common health problems with aging	2.2	2.3
Common diseases of the elderly	2.3	2.4
Pathological cognitive deficiencies	2.7	2.7
Pharmacology and the elderly	2.4	2.6
Nutrition and the elderly	2.2	2.3

(continued)

Appendix M continued.

Gerontology Topic	Year Low Mean - High Mean
Principles of rehabilitation	2.1 - 2.5
Principles of activation	2.1 - 2.2
Principles of palliative care	2.5 - 2.6
History of gerontological nursing	2.2 - 2.3
Gerontology: interdisciplinary field	2.6 - 2.6
Research in gerontology	3.6 - 3.6
Organization of health care for the frail elderly	3.1 - 3.1
Nursing process and the elderly	1.6 - 1.8
Holistic health Assessment	1.8 - 2.1
Functional assessment	1.9 - 2.1
Mental assessment	2.0 - 2.3
Behavior assessment	2.1 - 2.3
Assessment of social supports	2.4 - 2.6
Assessment of environment and independence	2.4 - 2.4
Discharge planning for older adults	3.1 - 3.1
Teaching older adults	2.9 - 3.0
Leadership skills in geriatric settings	3.2 - 3.3
Communicating with the cognitively impaired	2.3 - 2.5
Communicating with the sensory impaired	2.1 - 2.5

Note:- Years recorded are low mean to high mean.

Appendix N

Year the "Experts'" Indicated the Gerontology Topic Should be Taught in the Generic Nursing Program.

Gerontology Topic	Year Mean Low	High
"Experts" say should be taught in 1st and 2nd year		
Normal physical changes	1.5	1.6
Personality development	1.6	1.8
Nursing process	1.6	1.8
Attitudes toward the elderly	1.7	1.7
Developmental tasks	1.8	1.9
Holistic Health Assessment	1.8	2.1
Cognitive functioning	1.9	2.0
Theories of aging	1.9	2.0
Functional assessment	1.9	2.1
Patterns of coping	1.9	2.4
Successful aging	2.0	2.0
Family relationships	2.0	2.1
Mental assessment	2.0	2.3
Normal losses of aging	2.1	2.2
Principles of activation	2.1	2.2
Principles of rehabilitation	2.1	2.5
Behavior assessment	2.1	2.3
History of gerontological nursing	2.2	2.3
Common health problems	2.2	2.3
Nutrition & the elderly	2.2	2.3
Psychological adaptation	2.2	2.3
Characteristics of population	2.3	2.3
Common diseases	2.3	2.4
Communicating with the cognitively impaired	2.3	2.5
Communicating with the sensory impaired	2.3	2.5
Diversity of older population	2.4	2.4
Environmental assessment	2.4	2.4
Pharmacology & the elderly	2.4	2.6
Social supports	2.4	2.6
Health promotion	2.4	2.7
Ethnic elderly	2.5	2.5
Palliative care	2.5	2.6
Elderly in society	2.5	2.6
Gender issues	2.6	2.6
Interdisciplinary field	2.6	2.6
Ethical issues	2.6	2.6

(continued)

Appendix N continued

Gerontology Topic	Year Mean Low	High
Pathological cognitive deficiencies	2.7	2.7
Demographics of aging	2.7	2.7
Economics of aging	2.8	2.8
Governments response to aging	2.9	2.9
Teaching older adults	2.9	3.0
Topics "experts" say should be taught in 3rd and 4th year		
Discharge planning	3.1	3.1
Organization of health care	3.1	3.1
Political power of the elderly	3.2	3.2
Legal issues	3.2	3.2
Community resources	3.2	3.2
Leadership goals	3.2	3.3
Advocacy for the elderly	3.4	3.4
Research in gerontology	3.6	3.6
Topics "experts" say should be taught across all 4 years		
none - no topic given an .8 mean spread.		

Appendix O.

Percentage of "Experts" Who Indicated Gerontology Topic Should be Taught.

Gerontology Topic	Percentage of "Experts" 100%	90-99%	80-89%	70-79%
Theories of aging	X	-	-	-
Developmental tasks of later life	X	-	-	-
Personality development	X	-	-	-
Cognitive functioning	X	-	-	-
Normative losses of aging	X	-	-	-
Successful aging and well being	X	-	-	-
Patterns of coping	X	-	-	-
Psychological adaptation to aging	X	-	-	-
Demographics of aging	X	-	-	-
Characteristics of older population	X	-	-	-
Elderly in society	-	X	-	-
Governments' response to aging	-	X	-	-
Economics of aging	-	X	-	-
Political power of the elderly	-	X	-	-
Legal issues related to aging	-	X	-	-
Family relationships	X	-	-	-
Ethical issues and aging	X	-	-	-
Ethnic elderly issues	X	-	-	-
Gender issues and aging	-	X	-	-
Diversity in older population	X	-	-	-
Attitudes toward the elderly	X	-	-	-
Advocacy for elder health care	-	X	-	-
Health promotion	X	-	-	-
Community resources for elderly	X	-	-	-
Normal physical changes	X	-	-	-
Common health problems	X	-	-	-
Common diseases of elderly	-	X	-	-
Cognitive deficiencies	X	-	-	-
Pharmacology and the elderly	X	-	-	-
Nutrition and the elderly	X	-	-	-
Principles of rehabilitation	X	-	-	-
Principles of activation	X	-	-	-
Principles of palliative care	X	-	-	-
History of gerontological nursing	X	-	-	-
Interdisciplinary field	X	-	-	-
Research in gerontology	-	X	-	-

(continued)

Appendix O continued

Gerontology Topic	Percentage of "Experts"			
	100%	90-99%	80-89%	70-79%
Organization of health care for the frail elderly	X	-	-	-
Nursing process and elderly	X	-	-	-
Holistic health assessment	X	-	-	-
Functional assessment	X	-	-	-
Mental health assessment	X	-	-	-
Behavior assessment	X	-	-	-
Assessment of social supports	X	-	-	-
Assessment of environment	X	-	-	-
Discharge planning	X	-	-	-
Teaching older adults	-	X	-	-
Leadership skills in geriatric settings	-	X	-	-
Communicating with the cognitively impaired	X	-	-	-
Communicating with the sensory impaired	X	-	-	-

Appendix P.

Purpose of Gerontological Clinical Experiences:- "Experts'" Responses.

Hospitalized Older Adults: Acute Care (client-focused):-

To understand how older adults react to illness eg. acute confusion. (10)

To understand the effect of hospitalization on the elderly person and family. (5)

To understand pathophysiology of the elderly and how it differs from normal aging. (5)

Discharge planning. (3)

Hospitalized Older Adults: Acute Care (student-focused):-

To apply geriatric standards of care in a variety of settings. (5)

To develop skills in assisting the elderly cope. (5)

To observe how acute care philosophies often result in dependency. (4)

To understand medication use and the elderly. (2)

Rehabilitation Hospital (client-focused):-

To gain knowledge of the possibilities and potentials of the elderly for independence. (12)

To foster self care. (6)

To identify principles of rehabilitation nursing. (5)

Rehabilitation Hospital (student-focused):-

To learn of recovery process of the elderly from strokes, surgery etc. (4)

To teach, council and be an advocate. (3)

To contribute to the interdisciplinary team. (2)

To develop a plan of care for rehabiliating the frail elderly. (2)

(continued)

Appendix P continued.

Chronic/Long Term Care Facility (client-focused):-

To understand effects of institutionalization. (5)

To understand philosophy of long term care. (4)

To appreciate this is a special area requiring well educated nurses. (4)

To appreciate special needs of frail, disabled and demented elderly. (2)

Chronic/Long Term Care Facility (student-focused):-

To foster positive attitude with good role models. (5)

To observe family relationships. (5)

To assess ADL's. (4)

To understand quality of life issues. (4)

To apply gerontological nursing principles. (3)

Appropriate for 4th year to plan complex care in the context in which problems arise.

Private Residence of Older Person (client-focused):-

To appreciate the wealth of personal resources elders have to help them to grow. (25)

Examine how the elderly adapt to aging in the home environment. (18)

To observe use of community resources and support. (10)

To observe environmental safety. (4)

To observe family dynamics. (2)

Private Residence of Older Person (student-focused):-

Assess ADL's. (6)

To develop a therapeutic relationship. (2)

To integrate content of gerontological nursing. (2)

To use life review techniques. (2)

Psychogeriatric Unit (client-focused):-

To understand how cognitive dysfunction effects behavior. (7)

(continued)

Appendix P continued.

To understand elders with mental impairments. (3)

To differentiate between dementia and mental illness. (7)

Psychogeriatric Unit (student-focused):-

To understand management of disruptive, aggressive and wondering behavior. (8)

To practise mental status assessment. (6)

To communicate with the cognitively impaired. (5)

To alter nursing care to fit the patients behavior. (6)

Wellness Clinic (client-focused):-

To recognize healthy aging, independence and capabilities of seniors. (8)

To identify advocacy role for seniors. (2)

Wellness Clinic (student-focused):-

To participate in health promotion. (12)

To assess all aspects of the well elderly. (7)

To understand the referral process. (6)

To participate in community based health team. (5)

Senior Day Care Unit (client-focused):-

To become familiar with resources for caregivers and the elderly to allow them to remain at home. (15)

Observe coping strategies used by well elderly. (6)

To appreciate the role of transportation for the elderly.

Senior Day Care Unit (student-focused):-

To communicate with well and frail elderly. (6)

To understand the difference between day hospital, day care and other services. (3)

To foster creativity by providing nontraditional care. (3)

(continued)

Appendix P continued.

Senior Center or Club (client-focused):-

To understand the elderlys' social, leisure and recreational needs. (8)

To observe the elderly in their social interactions. (7)

To understand the diversity in the elderly population.

Senior Center or Club (student-focused):-

To study the concept of wellness in the elderly. (7)

To expose students to a fun atmosphere- a positive experience with the elderly. (6)

To observe factors effecting communication. (4)

To appreciate the sense of contributing to a community and fulfilling roles. (2)

Note: ()=Number of responses